

SPSS 2017-18

Book of
Abstracts

COMPUTER SCIENCE

SECTION 2A

2BE-CS-A -01 - IDENTIFICATION OF LYMPHOCYTES USING IMAGE PROCESSING

Krithika S Udupa
Akanksha Sathish
K Ramitha Ballal
Archana M

Mr. Bharath Bhushan (Guide)

ABSTRACT-

Blood plays an important role in the detection of most of all the blood related diseases like blood cancer, AIDS, TB and many more... and the detection has been carried out by the conventional method of blood test.

During the blood test, a drop of blood is placed on a glass slab, spread uniformly over the slab, and another glass slab is placed over it. The glass slab is then observed under a microscope. But the accuracy in obtaining the results is not upto the mark since there might be human error in the process.

In order to overcome the drawback, we are planning to develop an image processing algorithm which can be considered for, to solve the above mentioned issue.

BE- CS-A-02 AUTOMATED TRAFFIC POLICE

Ashish t kotian
Bhavish p puthran
Ashik K.
Chirag D Bangera

Mr Girish S (Guide)

According to survey death by traffic accident in india is increasing day by day . That is the reason for lot of death. here it is important to note that most of these accidents happen in city area and the causes of most of these accident is not following the simple traffic law. according to " who " in india one of the main reason of accident is not following the rules of speed limit. we indians still depend on traffic police to enforce these laws. problem is human are insufficient.

That's were our idea come into help citizen of india. we are planning to make a device which have a 2 cameras one camera will be fixed at a certain height from the road and it will detect the vehicals which are moving faster then speed limit and another camera will zoom onto to the no plate of vehicals and capture the photo of it.

We believe the device will be highly efficient at enforcing the speed limit law thus reduce the number of accidents and save hundred of lives.

2-BE-CS-A -03 ANDROID APP ON HUMANTRACKING

Anet P James
Akshatha
Athira M Saseendran
Chaitra M Poojary
Diana Dsouza

Ms. Suketha (Guide)

ABSTRACT-

A GPS based human tracking project ,which allows to accurately track a person through his/her mobile number.It helps us to search the location of the person and also distance between both.The app also needs the help of GPS for its proper functioning. Currently we have Google map by which we can get directions or location by giving source and destination . Here the app differs from Google maps by locating a person by his/her mobile phone number.

The main purpose of implementing this app is that it is helpful for lot of people who are visiting a new place and you are unknown to the surroundings note that in today's world one large area is known by a common name and you have to meet your friend. With the help of this only one thing you have to do i.e; enter that person's number in this app,if that person is also the user of this app you will get the exact location of the person whom you are searching for and his distance from you and the shortest distance to reach him.The development of this app is based on the java programming language

A wide range of tracking systems has been developed so far tracking vehicles and displaying their position on a map,but none of the applications has been developed so far which tracks human using their phone number.The overall objective of this project is to develop an app which is useful to society i.e; tracking human being using a GPS equipped mobilephone with the help of his/her number .

2-BE-CS-A-04 - DETERMINATION OF SOIL PROPERTIES USING IMAGE PROCESSING

Chaithra lakshmi C
Aravinda B, 4SF15C017
Deeksha, 4SF15CS039
Deeksha

Duddela Sai Prashanth (Guide)

India is an agricultural based country. Agriculture is mainly dependent on soil and rain. In order to get maximum product from the crop, farmer should select suitable crop for the given soil. To get the properties of soil, farmers used to go to agricultural offices with their soil samples. There officers extract the properties using some chemical processes. This process requires time, labour and costlier. In some cases the offices will be far away. Due to these reasons farmers

may not show any interest on soil testing. Because of this there are chances of decrease in production.

So this project introduces a new method which is instant and portable. In this project we are using image processing technique to extract the properties of soil. Properties like pH, texture of soil can be extracted using this project. According to the properties extracted, project will give the details about the suitable crop for the soil.

2-BE-CS-A -05 EXTRACTION OF TEXT FROM IMAGES FOR BANK PURPOSE

Deepa Anchan
Anusha Acharya,
Krithi.Dinseh.Kottary
Ashwitha Jathan

Mr. Madesha M. (Guide)

The extraction of information from cheques in banks is a tedious task for bankers as there are a lot of them coming for collection. This load can be reduced if the handwritten information can be easily converted to printed text and can be saved into their document. Even the printed information can be segregated to be saved along with the hand written text hence reducing the effort of typing handwritten text. It can also be implemented in scanning the number plates of vehicles. The debiting will be faster and easier when this technique is implemented.

2BE-CS-A-06 – TELEDROID

Archana Shetty S
Ankitha S Devadiga
Annapoorna P
Amrutha Shetty

Shailesh Shetty (Guide)

ABSTRACT-

The ultimate goal of teledroid is to provide a mobile env to access computing elements anywhere and anytime. If a person forgets to get his cellphone and if he needs any contacts or file which is in his phone then he can access those contacts or files from any others cellphone. He can access those informations without third persons interference. We are going to do the applications based on this.It is possible to extend both functionality and battery life of mobile device.

2-BE-CS-A-07 Q IT

Kavya S Kumar
B Ramya
Ashfiya Mumtaz Hassan
Anita Maria Dsouza

Dr.Rathishchandra R Gatti (Guide)

ABSTRACT-

Long queues are alarming signs for customers. Managing long queues during peak hours have always been a huge problem. In present times, due to heavy workload and limited amount of time, students use Xeroxed notes for reference which results in chaotic situations in the xerox centres. Our initiative is to make customers' experience more favourable by developing an app to resolve the above mentioned problems. Our queue management systems will be designed for Xerox centres in order to reduce queue lines and increase staff productivity and operational efficiency. Our queue solutions will be equipped to make your customer journey more superior and seamless.

2-BE-CS-A-08 - SMART DEVICES(MOSFET APPLICATION)

Shreya.K.S
Kavya.R
Arpitha
Krithi.K.R

Mr.Girish S. (Guide)

ABSTRACT-

The MOSFET (Metal Oxide Semiconductor Field Effect Transistor) transistor is a semiconductor device which is widely used for switching and amplifying electronic signals in the electronic devices. The MOSFET is a core of integrated circuit and it can be designed and fabricated in a single chip because of these very small sizes. The MOSFET is a four terminal device with source(S), gate (G), drain (D) and body (B) terminals. The body of the MOSFET is frequently connected to the source terminal so making it a three terminal device like field effect transistor. The MOSFET is very far the most common transistor and can be used in both analog and digital circuits.

2-BE-CS-A-09 - HOME SURVEILLANCE AND MOTION DETECTION

Akshath HS
Deepraj pednekar
lyazz
Keerthan PM
Karthik S Rai

Shailesh Shetty (Guide)

ABSTRACT-

Camera Based Surveillance System Using Raspberry Pi is mainly beneficial for determining crime, It monitors scenarios and activities, helpful for gathering evidences and detecting thefts instantly. The system is built to monitor home, offices and detect theft as soon as it takes place. System uses Raspberry Pi with a camera based circuit. System constantly monitors camera for motion. The camera input is constantly fed to the pi processor. The camera input is constantly processed by Raspberry Pi processor for any motion. If any motion is detected, the system goes into alert mode. System now sounds alarm as well as captures images of the motion happening. These images are saved for later viewing reference. Thus the system is an efficient camera based security system. It can be further enhanced by adding a gsm modem to send an alert sms or alert over IOT for remote alarm.

2 BE-CS-A -10 - FINDER FOR CENTRALISED DOWNLOADS

Abhishek P
Arjun Suvarna
Akash Shetty
Brijesh Patel
Karthik,
Krithesh Bhandary O

Duddela Sai Prashanth (Guide)

ABSTRACT-

Downloading files on the internet is very fragmented and can cause inconvenience. The need for obtaining data/resources online is crucial where data gets corrupted so easily. The present techniques are comparatively less secure and possibilities of data getting lost and damaged is very high as links to server downloads expire rapidly. A need for centralised, trusted source for downloads is very high in the market right now. Our service provides a better choice of download links so the end-user which are relatively unknown. As new websites spawn everyday, so do the download links and sifting through the download links comparing dependencies and better server speeds. This finally makes for a better user experience as more and more users return for the better download links provided by our service.

SECTION 2B

2-BE-CS-B-01 - HOSPITAL MANAGEMENT SYSTEM

Megha K B
Meghana S Bangera
Monika
Navya Prabhu M
Pallavi K

Ms.Shetty Mamatha Gopal (Guide)

Abstract

The client uses MS Excel, and maintains their records, however it is not possible them to share the data from multiple system in multi user environment, there is lot of duplicate work, and chance of mistake. When the records are changed they need to update each and every excel file. There is no option to find and print previous saved records. There is no security; any body can access any report and sensitive data, also no reports to summary report. This Hospital Management System is used to overcome the entire problem which they are facing currently, and making complete atomization of manual system to computerized system.

2-BE-CS-B-02 - VOICE BASED EMAIL SYSTEM FOR BLINDS

Rishali Ravi Kalnad
Pooja
Priyanka Shetty
Rajani Shetty
Rahul N

Harisha (Guide)

ABSTRACT

In today's world communication has become so easy due to integration of communication technologies with internet. However the visually challenged people find it very difficult to utilize this technology because of the fact that using them requires visual perception. Even though many new advancements have been implemented to help them use the computers efficiently no naïve user who is visually challenged can use this technology as efficiently as a normal naïve user can do that is unlike normal users they require some practice for using the available technologies. This paper aims at developing an email system that will help even a naïve visually impaired person to use the services for communication without previous training. The system will not let the user make use of keyboard instead will work only on mouse operation and speech conversion to text. Also this system can be used by any normal person also for example the one who is not able to read. The system is completely based on interactive voice response which will make it user friendly and efficient to use.

2-BE-CS-B-03 - INDIGO

Nishmitha
Sameeksha V.
Megha R Gatty
Sabna P N
Rani Adhaduk

Mr. Shailesh Shetty (Guide)

ABSTRACT

For people who are new to a place, It is very difficult to find the nearby ATM booths. This results in time as well as energy wastage. Our project aims to minimise the time and energy wastage. Our project is an Android project in which user can find the nearby atm booths irrespective of their bank. It will also provide other bank's atm booth if the user's bank is not available nearby.

2-BE-CS-B-04 - CLUSTER BASED PROTOCOL FOR WIRELESS NETWORKS

Madhusha.J.K
Manjula
Meghan.R
Raghul

Madesh.M (Guide)

ABSTRACT

A wireless sensor network (WSN) is a network that is made of hundreds or thousands of sensor nodes which are densely deployed in environment with the capabilities of sensing, wireless communications and computations. WSN have constraints on the nodes such as Memory, small-size, low-power consumption, fault-tolerance and scalability which has to be addressed in order to communicate between the nodes network. In source based approaches, as the network size increases the packet size is elongated and causes overhead of processor in the node where as in location based, it requires computation at every forwarding node in a path while looking for the next forwarding node resulting in excessive processing. An Energy Efficient location aware – source multicast cluster based approach for Wireless Sensor Networks is proposed. First, based on the geographic location information clusters are formed. Then, multicast tree is constructed from different sources to the sink to obtain all the possible paths. The proposed approach focuses on lowering the initial network topology, by reducing the number of active nodes and links, thus saving resources and increase the network lifetime.

2-BE-CS-B-05 – SMART DEVCE

Pankaj Kumar Rathi
Krithika Udupa
Prapthi P Rai
Megha Bhat K
Pratiksha P Bappal

Mr Girish M (Guide)

ABSTRACT

The smart deviCe is an initiative to create devices which can literally save energy resources. Here in our project, we are going to create a device that will convert the solar energy into electrical energy. Here, a transmitter, a transducer , a led(just for testing) and many more devices have been used. The implementation of this device can be made in streetlights were in people just switch on the streetlights but forget to switch it off. This device hence can save a lot of energy resources which can be utilised by the future generation.

2-BE-CS-B-06- ACADEM-APP

Mahammad Rumaan Khalander
Navneeth Krishna
Nihal P N
Nishithalakshmi

Mr. Shailesh Shetty S (Guide)

ABSTRACT

In the recent times, pupils who are enrolled to particular courses in the institutions have been found to be missing classes without the knowledge of their parents. This has caused a major trouble with the parents and the institutions. It has also been found that the academic and socio-behavioral records of each student has been unsuccessful to reach to the parents. Keeping all these concerns in mind with the use of recent technology of Android and server science, an application is developed solely for the parents of the pupils enrolled in an institution. This app will take care of all the updates with regard to the academic and socio-behavior of the pupil.

2-BE-CS-B-07 - HOME AUTOMATION WITH BRIGHTNESS VARIABLE LED BULB USING ARDUINO

M Karthik
Manjunath S Koralli
Neha C Poojari
Nidarsh N
Pratheeksha S Karandoor
S Rashwin Nonda

Mr. Shailesh Shetty (Guide)

ABSTRACT

The most recent and common problem faced by all households, in fact the entire community is the power loss or the electricity wastage. This in turn depletes the natural resources and economy. The major reasons for the electricity wastage are human negligence and ill management of appliances. In overpopulated countries like India, where the demand for electricity outweighs its production. So it is a necessary notion for the people of such countries to save electricity. This project aims to reduce the electricity wastage caused by human negligence by controlling the electrical appliances using arduino. The brightness variable led bulb allows us to either increase or decrease the light brightness according to our needs. Our device is fitted with a thermal sensor which can detect human presence. The device locates the position of the person in a room and informs the person whether he/she would like to switch on certain appliance or not. This project also involves a mobile app wherein user can control most of his electrical appliances. Suppose that the person has left the room, after a certain period of inactivity in the room, the device turns off all the appliance which are running excluding appliances like refrigerator.

SECTION 2C

2BE-CS-A -01 – EMAIL

Shreshta M. Naik
Shreejank S. Perla
Varsha L.K.
Varsha M.

Shamanth Rai (Guide)

ABSTRACT-

An email is widely used in the modern world as a mode of sharing information. It is essential part of modern communication with our project we are trying to achieve an email which is efficient in its working and has very less bugs which will make it work easier to work with and can give efficient results and performance, Making it more work friendly.

2BE-CS-A-02 – HELP OUT

Suhas K.
U. Krishnakanth Kini
U. Nileshkini
Vaibhav G.B.
Yashwin

Ranjana Paleppady (Guide)

ABSTRACT-

Help out aims to help or gather people for any one should need help. It aims to create a change by giving option for people to voluntarily opt into help. It encourages by giving out reward point for help. This is an application designed to run in both android and ios platform. It has feature that allows the user to login for authenticity of user and also helps you to get safe help.

2-BE-CS-C-03- E-MAIL

Shreyank S Perla
Shreshtha M Naik
Varsha M
Varsha LK

Shamantha Rai (Guide)

ABSTRACT:

An E-mail is widely used in the modern world as a mode of sharing information. It is essential part of modern communication. With our project we are trying to achieve an E-Mail which is efficient in its working and has very less bugs which will make it easier to work with and can give efficient results and performance. Making it more work friendly.

2BE-CS-A-03 – SPEED CONTROLLER OF TWO WHEELER USING AURDINO

Shetty Dipavi
Vaishak K.R.
Shimna S

Mr. Sailesh Shetty (Guide)

ABSTRACT-

The objective of building a self balanced 2 wheeler vehicle is mainly to ensure safety of the rider. We have considered the scenario of our country, India in this manner. Enormous number of people become victim of fatal accidents. Moreover, the cars in the cities are increasing day by day but the roads are not increasing so if a vehicle that can serve like a car and just takes the small amount of place like motor bike whether for parking or running on roads, would be better solution for people. With the cabin the rider is safe from impact of thrust and with the self balancing property of the vehicle, the rider is safe from accident. We are trying to reduce accident due to speed uncontrolled.

2-BE-CS-C-03- TWO WHEELER SPEED CONTROLLER USING AN ARDUINO

Dipavi Shetty
Shimna S
Vaishak R

Shailesh Shetty (Guide)

ABSTRACT

Nowadays the number of road accident is increasing,one of the main reason for this is over speed. Though there are some speed limits provided in certain area people always tend to cross the limit. We have come with a solution to this issue.using android application if someone tries to cross the speed limits then message will be sent particular number saved in gsm board. the main advantage is that parents will come to know at what speed their children are traveling or they will know someone tries to rob the bike or tries to damage it.message will be sent to owner of the two wheeler, parents and to any other number saved in the application. certain emergency number such as police,ambulance and fire brigade will be saved in that application.

2-BE-CS-C-04 – HEALTH CARE PLATFORM

Shruthi Nair
Sneha P Nair
Srushti S
Sanjana S Alva

Mr.Pavan kumar V (Guide)

ABSTRACT

The aim of the project is the use of information technology and management systems for the betterment of health care is more and more important and popular. The strong demand for various medical and public health care services from customers calls for the creations of powerful individual-oriented personalized health care service systems .It can support numerous health care tasks,provide individuals with many intelligent and personalized services ,and support basic remote health care and guardianship. Parallel control structures in the process models of a composite services and are highlighted in this content.

2-BE-CS-C -05 - BETTER SPSS, BETTER SAHYADRI

Varsha Vinod
Swarna
Vineesha Furthado M
Vidyashri

Mr. Shailesh Shetty (Guide)

The main objective of this project is to develop and maintain an android application for the 'Sahyadri Project Support Scheme'(SPSS).The application will contain a brief history about the SPSS, its foundations, and people who worked behind its starting and made it to the well functioning SPSS project exhibition now. The application will also contain pictures and descriptions of previous year's projects(only the winning ones till 2015 exhibition, due to the difficulty in getting the record of each project group that exhibited their project, but will have each and every one of the projects that will be exhibited this year onwards)with maximum technical details possible(some groups might not like to reveal their secret methods or some group might be preparing on extending their projects). We will also create login paths for different users so that there can be an administrator who can interact with all other logins. Professor Rathish Chandra Gatti Sir can interact with registered members through this method, reveal deadlines and fund installment details. We will also try to add more features if possible, as we are just beginners in android programming.

2-BE-CS-C -06 - SUGOI SUDOKU

Shridevi Kapileshwari, 3
Supravi Rai
Vaishnavi K L
Stuti Bhardwaj

Mr.Duddela Sai Prashanth (Guide)

ABSTRACT

Sudoku is a familiar mind game. The objective of our project is to develop an algorithm with the least number of steps to obtain an optimized solution. We have taken inspiration from Genetic Algorithm, Harmony Search, Metaheuristics, and Artificial Bee Colony to enhance the solution. The primary concern is to generate a Sudoku puzzle and then implement it into a Sudoku solver.

2-BE-CS-C -07 ONLINE ORDERING FOOD

Sheefali B.S.
Shreenidhi
Sreejitha N.
Suchetha V.

Mr. Sunil C.K. (Guide)

ABSTRACT

The main objective of our project is to develop an Android app for the Sahyadri Canteen that will help the people in the campus. The project mainly consists of the items that are available in the canteen along with its cost. Any member who used this app can directly order from its smart phones inside the campus. The items that are ordered will be stored in the canteen data base and they will get the count of the items. Every member is going to have a unique identity number and the ordered items will be stored in their account. Even the website will be created for the canteen, so that all the PC's can be linked for the same purpose.

2-BE-CS-C-08 – BLINKING EYE TO PREVENT COMPUTER VISUAL EYE SYNDROME(SYSTEM SOFTWARE)

Shravya
Sanamhassan
Faraz Syed
Yadavi

Ms.Ranjana Paleppady (Guide)

ABSTRACT

Blinking eye for computer visual eye syndrome is a system software mainly developed to provide a solution to the problem statement from medical domain. Visual syndrome is hardening of retina of eye caused due to staring at pc screen without blinking our eye. Research has shown that average people blink their eyes 16-18 times per second but when the same person working on pc seems to blink 3-4 times per second. This has a very direct effect on our eye. Blinking eye system software is developed by first surveying and finding the frequency rate of blinking of eye for individual and then by taking average we will develop a blinking eye in a computer screen that blinks at the same rate like humans so the person using pc will automatically blink his eye. By monitoring co-ordinates and keeping rate of blink in our mind this software will be developed

2-BE-CS-C -09 – ANALYSIS OF SORTING ALGORITHM

Thrishathi K.C.
Yashavanthi
Renuka Biradar

Ms. Rajini (Guide)

ABSTRACT

The problem of sorting is a sequence of n elements on a parallel computer with its k processor in computer. The algorithms we present can all be run on a single instructions stream multiple data stream computer. For large n each achieve an asymptotic speed up ratio of k with respect to the best sequential algorithms. The linear (in k) speed up is optimal in the number of processors used.

2-BE-CS-C -10 LAB LOGISTIC MANAGEMENT

Sheetal VM
Shrinidhi Rao
Sanath
Shrinidhi V.
Shravana S Rao

Ms. Ranjana Paleppady (Guide)

ABSTRACT

The use of technology has grown substantially all over the world in recent years and this has created huge quantities of using different software. Recent studies has shown that the use of technology has grown aggressively and this has show that there has to be simplicity in the technology. Our project deals with online attendance system with high security It contains two accounts
>administrative account
> student account
Administrative account:
> he can access student account
> he can allot attendance manually
> can make changes with student account

2-BE-CS-C-11– WEBSITE FOR CAR REGISTRATION

Sumana
Swarna Bharathi Mallya K
Swasthika
Vasundhara B K

Ms.Ronnie Merin George (Guide)

Passenger vehicles are major pollution contributor, producing significant amounts of nitrogen oxides, carbon monoxide, and other pollution. In 2013, transportation contributed more than half of the carbon monoxide and nitrogen oxides, and almost a quarter of the hydrocarbons emitted into our air. The health risks of air pollution are extremely serious. Poor air quality increases respiratory ailments like asthma and bronchitis, heightens the risk of life-threatening conditions like cancer, and burdens our health care system with substantial medical costs.

2-BE-CS-C -12 - ANDROID BASED APPLICATION CALLED “FISHKART”.

Shareef
Vignesh
Vishak
Sathvik

Mr. Sunil CK (Guide)

We ie(shareef,vignesh,vishak and sathwik) are developing an android app under the guidance of Sunil CK.The application is called as 'fish cart',so as the name suggests it gives information about different varieties of fishes(also prices) available in the market on the go.since since in mangalore most of the people consume fish we hope this app saves a lot of time as the consumer do not technically have to go the market.what we are developing is just the prototype or the demo version of the app but the app is open for changes in the future.

2-BE-CS-C -13 ONLINE EXAMINATION SYSTEM PROJECT IN PHP

Mohammad Safwan K
Shreehari K
Bhuvananda
Abdul Nasir

Ms. Ranjana Paleppady (Guide)

ABSTRACT:

Online Examination System is an online test simulator to take online examination in an efficient manner and no time wasting for manually checking of the test paper. The main objective of this web based online examination system is to efficiently evaluate the student thoroughly through a fully automated system that not only saves lot of time but also gives fast and accurate results. For students they give papers according to their convenience from any location by using internet and time and there is no need of using extra thing like paper, pen etc.

Online examination system helps students to offer a quick and easy way to appear for the test. It also provides the results immediately after the examination with 100% accuracy and security. Student can enter to perform exam only with their valid username and password. This examination contains multiple choice questions and appropriate number of options. There are no limitations on number of options and it can be randomized so same set of question will not appear to all student so it prevent manipulation. More than one option can be correct but the user can select only one option. This provides time limit. The user can see their results after

completing the exam. This helps the students to write the exam from far distance and which can provide security and simplicity and other beneficial features to the user.

SECTION 3A

3BECS-A-01 - SIMULATION OF OSI MODEL

Anzel Fernandes
Akshith Kumar S
Abhiram Ojaswi
Abhishek S

Sunil B N (Guide)

ABSTRACT:

Computer students need to understand both the theoretical and practical aspects of computer networking. As computer science teaching methods continue to mature, experiences in mixing theory and application have been shared in the community. Combining theory and practice in a single course on computer networks is difficult because of the complexity and scale of modern networks. Classroom modeling of networks is a technique to illustrate the theoretical aspects of networking through practical models of computer networks. In this paper a visualization tool is developed and it would be useful for students to understand the difficult concepts of computer networks. It provides the design and working of network architecture, which allows communication between computer systems. This approach provides the opportunity to learn and teach computer networking.

3BECS-A-02 – ADMISSION FOR COLLEGE

Bhavishya N. Kotian
Chaithra
Gagana T Naik
Sheik Sahim

Mr.Duddela Sai Prashanth (Guide)

ABSTRACT

Our project is admission for a college. It is a website. Its main purpose is to help the student to take admission from the college. In our project we have done a website for Sahyadri Engineering College. It has 3 pages
First page is the home page. It is the page which contains the details regarding the college
Second page is about which consists of an admission form. It contains different fields regarding the details of the student and that needs to be entered by the student.
Third page is the gallery which contains the college gallery.

3BECS-A-03 - CONTROLLING SWITCH BOARD

WINDOWS APPLICATION FOR TIME TABLE CREATION

Akshatha A
Anvitha P R
Athullya Chandrashekar
Jovita Sharal Coutinho

Mr. J V Gorabal (Guide)

ABSTRACT:

This application controls the various appliances connected to your arduino and relays. Using this android application we will be able to control lights, fans, air conditioning etc by smart phone. This system uses Bluetooth to connect with your device and control the various appliances in your home.

Arduino is an open-source electronics platform based on easy-to-use hardware and software. Arduino boards are able to read inputs - light on a sensor, a finger on a button, or a Twitter message - and turn it into an output - activating a motor, turning on an LED, publishing something online. You can tell your board what to do by sending a set of instructions to the microcontroller on the board. To do so you use the Arduino programming language.

A relay is an electrically operated switch. Many relays use an electromagnet to mechanically operate a switch, but other operating principles are also used. Relays are used where it is necessary to control a circuit by a separate low-power signal, or where several circuits must be controlled by one signal.

3BECS-A-04 – PYTHON BASED APPROACHES TO MACHINE LEARNING ALGORITHMS

Dency Ben Dadhaniya
Deepthi H.
Aishath Ashfeena
Akshatha M.S.
Neenu K. Baby

S.N. Bharath Bhushan (Guide)

ABSTRACT:

The basic idea is that after a web camera captures the image this image will be stored in the test folder. The system should be trained with images of various people in the train folder only those images which are trained will be identified after the camera has captured the image. The person will be identified by the name of the person displayed in his/her image at the output.

3BECS-A-05 - FRIEND FINDER

Chaitra Kamath G
Anjali Ajith
Bolar Navyashree
Melita Michael Lobo

Shetty Mamatha Gopal (Guide)

ABSTRACT

Modern hand held devices such as smart phones has become increasingly powerful in recent years. The number of extra features included in these devices have opened the doors to a wide range of commercial possibilities. However even with all these abilities, there are few applications that allow much passing of the environmental information and location based services.

One application that falls into this category is the Friend finder. Where the user has the facility to find the friends present in their nearby locality and can also obtain the detailed review of the person he chooses to meet. The aim of this project is to develop a mobile application on the android platform, using various concepts like computer networking, database management etc. We use the android studio software which includes a variety of custom tools. The app thus created will be user friendly and provides user with various options such as to map location of locality, details about the place of friend, distance between them etc.

3BECS-A-06 - ANDROID SMART HEALTH PREDICTION

Jayalaxmi
Deeksha.G.Shetty
Deeksha
Kavyashree

J.V.Gorabal (Guide)

Abstract

It might have happened so many times that you or someone yours need doctors help immediately, but they are not available due to some reason. The health application is an end user support and online consultation project. Here we propose an android application that allows user to get instant guidance on their health issues through an intelligent health care application online. The application is fed with various symptoms and the disease/illness associated with those systems. The application allows user to share their symptoms and issues. It then processes user's symptoms to check for various illness that could be associated with it. The application also has a doctor login. The doctors may now contact the patient for further process.

3BECS-A-07 - HAND ANALYZER

B Karthickeyan
Achala Adiga
Harshitha N Kotari
Akshay kumar

Mr.Bharath Bhushan (Guide)

ABSTRACT

Handwriting Analysis or Graphology is a field of study for identifying and understanding people's personality, behaviors and characters through analyzing their handwritings. The most common application of graphology is in employment profiling.

3BECS-A-08 – PYTHON BASED IMAGE PROCESSING

Deepali S.
Hegde Abhijna Satish
Kavya R.
K. Sowmya

S.N. Bharath Bhushan (Guide)

ABSTRACT:

Image processing based python project where the coding for the game such as bouncing ball, hangman, memory game, tic tac to has been done. These are used to play for the kids.

3BECS-A-09 - VEHICLE NUMBER PLATE RECOGNITION

Dishan iyanna M.S.
Gowtham L Sharma
H.N. Nikhil
Karthik A.

S.N. Bharath Bhushan (Guide)

ABSTRACT:

It is the vehicle's number or licence plate recognition algorithm based on the very elementary techniques to templates matching. The algorithm takes an input image of the number plate and after filtering the image it performs region based operations. Then it tries to capture the characters regions in a processed binary image and with the aid of templates matching outputs the string of number plate characters

3BECS-A-10 - DELIVERY SPECIALISTS

Ajay Amanna,
Bharathraj Kottari
Balachandra
Karthikeyan

Prof. Girish S (Guide)

Our project titled "Delivery Specialists" is mainly concerned in delivering milk, magazine and newspaper to your door steps. In today's busy life people don't find time to bring this to their home getting up early morning. So our website helps the people to easily register and be a member delivery specialists and get products delivered.

Developing the website using php, our main agenda is that the website should be user friendly. Getting the sms as well as the email alert after registering and also getting the monthly bill will help users. You can also change the products being delivered any time you want. So that the website will be more user friendly .If user has lost his password he can recover his password using his email-id. So that at any time they would feel secure to use the website. Those who have the habit of more reading you can also select multiple newspapers or magazines in our website.

3BECS-A-11 - ANDROID BASED LIBRARY APPLICATION

Chandraprakash P
Harshith C Shetty
Jeevan T B
Jithesh

Mr . Sunil. B. N. (Guide)

ABSTRACT:

Nowadays students issue the books from the library and they forget to return the books back in time. So we the team of 4 people decided to develop an application based on android platform which sends the remainder in the form of SMS and an Email prior to the return date so that the student can return or renew the book in time.

We develop this application in android studio. We make use of languages like java,xml,sql. In the initial phase of the project we create our own sample database and work on that. Later will make use of the library databases of educational organization. In the later phases will add more features like availability of books in the library, arrival of new textbooks.

3BECS-A-12 – SENTIMENTAL ANALYSIS USING MACHINE LEARNING APPROACHES

Ashika Rai
Atita D Rai
Deyona R Pais
Henrita D. Saldhana

S.N. Bharath Bhushan (Guide)

ABSTRACT:

The process of computational identifying and characterizing opinions expressed in a piece of text, especially in order to determine whether the writer's attitude towards a particular topic, product, etc is positive, negative or neutral. This technique is called sentimental analysis. So we use machine learning approaches to perform sentimental analysis.

3BECS-A-14 - WEB BASED ONLINE SUPPORT FOR FARMERS

K Lavanya Devadiga
Chanchalakshi
Ashwini A B
Chaithra P Bhat

Madesha M (Guide)

ABSTRACT:

In India 50-60% of the population depend on agriculture .Farmers are the backbone of our country. But the farmers here face a lot of problems such as crop loss, lack of knowledge about which crop is suited for the type of soil in that region, type of irrigation and plantation to be implemented etc. The website which we are developing is a small step towards this approach. Our website provides solution to the problems faced by the farmers. Through this website the farmers can write to us about their problems, if the problems are about crop diseases they are required to send a photo of diseased plant along with the description and this project will provide the solution.

SECTION 3B

3BECS-B-01 - ANDROID APPLICATION FOR FIRST AID TIPS

Rashali D Shetty
P Y Sagar
Melissa Montheiro
Shanida Nihmath Kota

Mr.Pavan Kumar V (Guide)

Our project is an android application .The app is related to the first aid tips for the users. Suppose if any person gets injured in anyways the first precaution to be taken is the first aid. But there are many people in the world who are unaware about how the first aid to be given for different injury's or any kind of health disorders. Our application helps the user in instructing them regarding the first aids to be given for different injury's or health disorders. We make use of android studio software to develop this application. Though the project is purely software based so it is budget free. Our project does not have any negative impact on the society as it gives guidelines to its users about how to give the first aid for any injury.

3BECS-B-02 - AN INTERNET OF THINGS APPROACH FOR MOTION DETECTION USING RASPBERRY PI

MOTION ACTIVATED SURVEILLANCE SYSTEM

Prathviraj Shetty
Nitin S Prakash
Nithesh
Kiran Kedilaya

Mr. Shamanth Rai (Guide)

ABSTRACT

Internet of things is the communication of anything with any other thing, the communication mainly transferring of use able data, for example a sensor in a room to monitor and control the temperature. It is estimated that by 2020 there will be about 50 billion internet-enabled devices. This project aims to describe a security alarm system using low processing power chips using Internet of things which helps to monitor and get alarms when motion is detected and sends photos and videos to a cloud server/Android Application. Moreover, Internet of things based application can be used remotely to view the activity and get notifications when motion is detected. The photos and videos are sent directly to a cloud server, when the cloud is not available then the data is stored locally on the Raspberry Pi and sent when the connection resumes. Therefore, advantages like these make this application ideal for monitoring homes in absence, filming wildlife, Monitoring Agricultural areas at night.

3BECS-B-03 - DESIGN AND DEVELOPMENT OF A FILE WITH .BAT EXTENSION FOR WINDOWS WHICH ACTS AS AN “ANTIVIRUS” WHICH DETECTS AND DELETES ALL THE MALWARE AND VIRUS FILES IN SCANNED LOCATIONS.

Pavan P
Ranulf Jonathan Noronha
Prallad Shetty K
Milan Kumar
Keerthi Shetty

Mr.Madesha M (Guide)

Design and development of a file with .bat extension for windows which acts as an “ANTIVIRUS” which detects and deletes all the malware and virus files in scanned location.

sub goals:

- To make sure that the created anti virus works fine with all kind of malware and viruses.
- To make sure that our product keeps the computer safe and secure.
- To make sure that created file consumes very less space in secondary memory for storage.
- To ensure that the created file consumes very small amount of space in primary memory during execution.
- To develop the antivirus in such a way that which runs perfectly in command prompt and provides a better graphical user interface for the user.
- To test the created product in all worst cases and produce it to users .
- To provide the details of our team in our product so that in case of any queries or complaints users can contact us.

3BECS-B-04- WEB APPLICATION DEVELOPMENT FOR FITNESS FREAKS

M. Sanjana Kamath
Salmin Naz
Neha Ali
Mohammed Thalath
Srirekha

Duddela Sai Prashanth (Guide)

ABSTRACT

In the present modern world, importance of web applications has grown tremendously. The major focus of this project is to target the user who is aiming to stay fit. The idea behind the project is to make an interface where physical fitness is at their finger tips. The focus in this application is towards physical fitness primarily YOGA. Whole YOGA is divided into three main categories 1. Beginners 2. Intermediate 3. Expert which helps the user to choose the level they want to be. The other features that this application provides to the user are choosing the appropriate exercise, which can be practiced, its advantages and majorly who shouldn't try it. The key additional features are maintain the record of their workouts & adding them into their Google calendar if required, reminding the user about the workout through mails and preferably by SMS

3BECS-B-05 - PAPER CURRENCY RECOGNITION USING IMAGE PROCESSING.

Natasha Pereira
Reshma Dsouza
Meghna M Rai
Renida Crystal Dsouza

Ms. Ankitha K (Guide)

ABSTRACT:

Paper currency is a widely used negotiable instrument by people. Bank notes are made by bank payable to bearer on demand. Counterfeiting, the forgery of banknotes, is an inherent challenge in issuing currency. The bank notes cannot be determined to be real or forged/fake with our bare eyes. Banks often use fake note detector machines which use UV rays to detect the vulnerability. But the detecting machines are costly and bulky to carry around and they also need electricity to work. Our project aims at creating an efficient and smart tool to this job using the resources already available like mobile phones. This can be achieved using the image processing technique.

3BECS-B-06 - SAHYADRI GAME STORE

Linford Royan
Neha S Bekal
Keerthana.S

MR.Jinto Thomas (Guide)

The concepts of gaming is very popular among entertainment as well as educated circles. The main objective is creating an entertaining as well as edu based games.

3BECS-B-07 - BLOCK BY BLOCK ENCRYPTION AND DECRYPTION OF IMAGES USING MATLAB

R Deeksha
Roshani Maria DSouza
Khulood Ibrahim
Sapnaz S

Ankitha K (Guide)

ABSTRACT

The basis of the project is securing transmitted data in open networks. Each type of data has its own features; therefore different techniques should be used to protect confidential image data from unauthorized access. In this project we introduce a block based transformation algorithm based on combination of image transformation. In encryption the original image will be divided into blocks and is rearranged into transformed image. The results show that the correlation between image elements was significantly decreased by using the proposed technique

3BECS-B-08 - MILEAGE CALCULATOR

Sameeksha K Mendon
Satvika J Rrai
Prathvishree
Raksha R Bbhandary

Shetty Mamatha Gopal (Guide)

ABSTRACT

As we know nowadays vehicles are very important means of transportation. The amount of fuel consumed by a vehicle can be calculated by calculating mileage. We can get an approximate amount of fuel a vehicle will consume for travelling a fixed amount of distance. This app will help to plan trips or long distance travelling based on mileage of the vehicle. It is even helpful for customer to buy a good vehicle based on its mileage.

This is an easy way for common people to know about the vehicles mileage and an approximate fuel requirements for the vehicle.

3BECS-B-09- HUMAN EYE DEFECT DETECTION IN IMAGE PROCESSING

Marelin Sanorita Fernandes
Mariam Ibrahim Shaikh
Nafeesathul Misiriya.T.K.P
Namitha C T

Ankitha K (Guide)

ABSTRACT

The eye diseases are common among the people in the society. The iris (plural: iridis or irises) is a thin, circular structure in the eye, responsible for controlling the diameter and size of the pupil and thus the amount of light reaching the retina. Eye colour is defined by that of the iris. In optical terms, the pupil is the eye's aperture, while the iris is the diaphragm that serves as the aperture stop. We use simple and effective code to detect in the iris of the human eye by comparing the retina of a normal and defective eye if any defect found then identifying the defect. The outcome of proposed model is to recognize the defect in a person's iris. This iris detection scheme will be very useful to our society and can be used effectively in the medical field. Using our model people can identify iris abnormality in early stages and can take appropriate treatment.

3BECS-B-10 - BLUETOOTH BASED CHATTING SYSTEM USING ANDROID

Rachana S Alva
Meghna B M
Mayuri S Kuckian
Prathiksha Bhat

Shailesh Shetty (Guide)

ABSTRACT

Communication is very important between the people in all areas, why because through communication we can share knowledge, exchange ideas, chat with friends etc. Communication plays vital role in any situation to full fill our needs/tasks. Now a days we are using Mobile phones to send SMS and chatting with friends for this if we want to send a message to any one we are depending on service providers like AIRTEL, VODAFONE, IDEA and many more; these messages will be charged. In this Project we develop a chat application which uses Bluetooth to connect two or more mobiles and chat with any people at a time, free of cost. This application has an option of group chatting also. Bluetooth chatting is an innovative approach to the mobile world. This application shows use of Bluetooth in terms of chatting. The main screen has just a list which has two values server and client. By selecting one of these two values, the corresponding instance is created. Main screen is used to initialize the connection. It does following thing at here. First, it starts the application and search the Bluetooth device. It sends the signal to the server class. Second, it can run, pause and stop the application. Third, it shows alert using set Alert function on every changing. Server class goes active when it go signal from the main class. It sends the hello world string with the string to the other devices. Client class works to respond the other Bluetooth device server.

3BECS-B-11 - FISH FINDER USING ANDROID APPLICATION

Kirana S
Pavitra
Priyanka K P
Rashmikiran S

Ankitha K (Guide)

ABSTRACT

Fishing in India is a major industry in its coastal states, employing over 14 million people. Ecological and environmental parameters play a primary role in the formation of fish biomass. The fishermen in India are facing a lot of issues regarding locating fishes under water. The main aim of this project is to overcome the problems faced by the fisherman by using hands on device by watching live picture using their smart phone. Here we create an android application that will help the fisherman to detect fishes under water irrespective of the number of fish using cameras and sensors connecting through Bluetooth. This project is also used to identify the purity of the water and also the factors like temperature, pH, conductivity, amount of dissolved oxygen in the water etc. Hence, by using this efficient hands on device it will be easier for the fishermen to locate fishes under water which will increase their efficiency and also improve Indian economy .

3BECS-B-12 - HASHING TECHNIQUE

MOTION DETECTION

Neha Phulase
Nidhi KC
Pooja MS
Preksha B

Mr. Shamanth Rai (Guide)

ABSTRACT

Hashing is the transformation of a string of characters into a usually shorter fixed-length value or key that represents the original string. Hashing is used to index and retrieve items in a database because it is faster to find the item using the shorter hashed key than to find it using the original value. It is also used in many encryption algorithms. In addition to faster data retrieval, hashing is also used to encrypt and decrypt digital signatures (used to authenticate message senders and receivers). The digital signature is transformed with the hash function and then both the hashed value (known as a message-digest) and the signature are sent in separate transmissions to the receiver. Using the same hash function as the sender, the receiver derives a message-digest from the signature and compares it with the message-digest it also received. (They should be the same.)

3BECS-B-13 – COOK, EAT AND REPEAT

Khatheeja Sumayya
Manasa
Nikhitha V. Anchan
Priyanka P. Naik
Rochama P. Shetty

Duddela Sai Prashanth (Guide)

ABSTRACT:

The project deals with the creation and use friendly and interactive cooking website. The recipe emphasis of all inclusive step by step procedure our website requires less bandwidth in comparison to most of the available cooking video's. We will set forth if well grounded health tips which will be beneficial for our mess website. One of the major high web portal with our very own canteen management system which supports the creation and modification of digital c.... It is used to support multiple user with minimal expertise in the field of computer.

3BECS-B-14 - PLACEMENT MANAGEMENT SYSTEM

Madhu Adiga H
Madhuri Nataraja
Nischitha P

Mr Jinto Thomas (Guide)

ABSTRACT –The aim of the project is to provide a one stop placement portal to make placement procedure easier. The website will provide complete details about the companies visiting the campus. The student details will be made available to the companies and also eligible students will receive notifications and updates as and when required.

3BECS-B-15 - PHOTOCOPY MANAGEMENT SYSTEM

Manisha M Puthran
Manjushree Bhandary
Roshani Kalander

Mr. Jinto Thomas (Guide)

ABSTRACT:

The basis of the project is to help the student with the photocopying issues. With the help of this website the photocopy in-charge will be loading the details of the document available with him. Based on their requirement the students can place order for the documents through the website. Once the order is places the photocopy in-charge will receive a notification directing him to complete the order. Once it is complete he will send the notification to the student through the website. Thus the student can collect the required document there by reducing the hassle's faced by the student near the Xerox counter.

SECTION 3C

3BECS-C-01 - GSM BASED AUTOMATIC GARBAGE BIN OVERFLOW DETECTOR. (GBAGBOD)

Shraddha Shetty
Sparsha H Shetty
Vimal Sandra DSouza
Varsha Shetty

Ms Pooja NS (Guide)

ABSTRACT

In our city many times we see that the garbage bins or dustbins placed at public places are overflowing. It creates unhygienic conditions for people. Also it creates ugliness to that place. At the same time bad smell is also spread. To avoid all such situations we are going to implement a project called Garbage collection bin overflow indicator using GSM technology. In this project we are going to place a weight sensor under the dustbin. When the weight reaches to the threshold value, a sms will be sent to the respective Municipal / Government authority person. Then that person can send the collection vehicle to collect the full garbage bins or dustbins. We have observed that the municipal officer or the government authorized person will monitor the status of dustbin. Or generally we see that they have a regular schedule of picking up these garbage bins or dustbins. This schedule varies as per the population of that place. It can be once in a day or twice in a day or in some cases once in two days. However we see that in case there is some festival or some function, lots of garbage material is generated by people in that particular area. In such cases the garbage dustbin gets immediately full and then it overflows which creates many problems. So in situations, with help of our project the government authority person can get SMS immediately. So they will get SMS before their periodic interval visit of picking up the dustbin. Then they can go and pick up the dustbins.

3BECS-C-02 – EXTRACTING HANDWRITTEN TEXT FROM AN IMAGE USING ANDROID APPLICATION

Sanath R. Kashyap
Pavithree B. Shetty
Sneha V. Kamath

Duddela Sai Prashanth (Guide)

ABSTRACT

The aim of this project is to review existing method for handwritten character recognition problem using artificial neural networks and implement one of them for a user friendly android application. The main task the application provides a solution for handwriting recognition from a picture. The recognition model we have chosen is a multilevel perception because it provides high performance on non-linearly separable problems.

3BECS-C-03 – EXAM GURU

Shubhalaxi A
Shravya S.
Urmila

Mr. Shomanth Rai B (Guide)

ABSTRACT:

This is the website which helps the students to get all the notes with question papers and syllabus of all the subjects easily just by logging in. Both students and lecturers can upload their notes. This is very helpful for the students in their academics.

3BECS-C-04 – GENERATION OF FINITE AUTOMATA TRANSITION DIAGRAMS

Shree Krishna
Sherlin Niel Pinto
Suraj Shettigar
Shishir
Shetty Ashish

Harisha (Guide)

ABSTARCT:

Our project deals with the concepts of Formal Languages and Automata Theory. Our goal is to convert a given transition table of any finite automata to its corresponding transition diagram

3BECS-C-05 - BLOOD BANK MANAGEMENT SYSTEM

Shilpa. R. K
Shreya J Poojary
Shreyas. K. P.
Sushmitha
Sweety Jarita

Ms. Pooja. N. S (Guide)

ABSTRACT:

BLOOD BANK MANAGEMENT SYSTEM is a software application to maintain day to day transaction in a blood bank. This software help to register all the donors, Blood collection details, blood issued details etc.

The basic building aim is to provide blood donation service to the city recently. Blood Bank Management System (BBMS) is a web based application that is designed to store, process, retrieve and analyze information concerned with the administrative and inventory management within a blood bank.

The proposed project aims at maintaining all the information pertaining to blood donors, different blood groups available in each blood bank and helps them manage in a better way. The Project aim is to provide transparency in this field, make the process of obtaining blood from a blood bank hassle free and corruption free and make the system of blood bank management effective.

3BECS-C-06 – CAR GAME USING OPENGL

Vaishnav Shenoy B.
Visgal Singh

Dr. Pushpalatha (Guide)

ABSTRACT:

We are creating a car game using OPENGL.

3BECS-C-07 - SMART WEBSITE

Shreesha
Sneha
Swathi K Rao
Viola Mathias

Ms. Pooja. N. S (Guide)

ABSTRACT:

Smart website is a website containing descriptions of all mobile phones that are existing. Website includes a particular phone's details such as model name, features, rating, user views etc.

The main objective of the website is to provide information about all phones while buying a new phone i.e., the website is one site for all mobiles. User can only know about the phone and cannot buy it from this site and can leave their reviews after buying it from other store.

3BECS-C-08 - MEDIA PLAYER/WEB BROWSER/CALCULATOR

Shwetha Thantri P.
Charan C.C.
Vineeth Kumar
Charan Raj
Rohan P Naik

Shamanth Rai. B (Guide)

ABSTRACT

The main objective of this project is to study and implement the graphical user interface using visual basis software. We have developed all is one media player which is capable of playing

wide variety of media files including JPEG, MP3, MP4, MOV and major file formats. This is very efficient as the GUI is very simple and precise. This saves physical memory (RAM) and makes the video or audio playback flawless. Calculator is designed and developed using basic arithmetic functions and GUI. Web browser is developed for ease access. Simple Design makes the browser easy to use and navigate through pages. Web browser is capable of opening homepage by default and able to open any websites as per use requirements.

3BECS-C-09 – THE SHORT STORY ‘DOVE AND ANT’ USING OPENGL

Thasheerfa
Sahima Begam
Sheikh Safa

Mr Harisha (Guide)

ABSTRACT

We have depicted the story of “Dove and Ant’ using OPENGL library. Here the story is all about how helping one creature to other.

3BECS-C-10 – PRIVACY TALE ALGORITHM

Archana.T.S.
Vishnu balakrishnan
Varun govind.C

Ms. Suketha (Guide)

ABSTRACT:

Now-a-days all the confidentiality data are sent through internet. To secure that data we are using encryption and decryption. In a social media’s like facebook, twitters etc. to protect the data, profile, status, post we use an algorithm called social media privacy to take algorithm. This project demonstrates the working of this algorithm. Here we used HTML and not using any kind of backend. If we want we can implement in features using ORACLE, MYSQL etc.

3BECS-C-11 - USER FRIENDLY CMS

Suhas B S
Ajay Patel E
Vidhyabhushan V K
Suhas
Srilaxmi V Shetty
Sneha Sunil Bhat

Mr Harisha (Guide)

ABSTRACT

Cms is content management system where a non coder can create website, format management, history editing ,indexing ,searching. Here in our project we trying to bring out the very friendly way to use a cms . We are concentrating on web development and to provide the

user with limited expertise, to add, modify and remove content from a Web site without the intervention of a webmaster.

3BECS-C-12 - CLINICAL RECORD

Shwetha Kumari
Vehetha M.
Vismitha Muthappa K
Vidya Shankari B.
Sumana S.

Dr. Rajni (Guide)

ABSTRACT:

Clinical Record is a tool which stores the details of patients in clinic. It uses visual basic 6.0 in front end and MS access in back end. Using this tool patients details can be easily stored, updated, punted and deleted Storing this data on clouds, can help to keep an account of different cilinics.

CIVIL

SECTION 2A

2BE-CV-A-01 - UTILIZATION OF PLASTIC WASTE AS A FINE AGGREGATE ON CONCRETE BLOCKS

Sahana Afreen
Zainab Thanseeha
Vinson Daniel D'Almeida
Zulaika Rahila
Rachita Rajeev

Ms Ramya K (Guide)

Abstract

The use of plastic is growing day by day, although steps were taken to reduce its consumption. A extensive growth in the consumption of plastic is observed all over the world in recent years that has led to dumping of huge quantities of plastic related wastes in the environment. Disposal of large quantity of plastics may cause pollution of land, water bodies and air. To overcome disposal of plastic waste , these wastes can be used in construction material like concrete.

The rapid industrialization and urbanization in the country leads lot of infrastructure development. This process leads to several problems like shortage of construction materials, increased productivity of wastes and other products. The proposed concrete which is made up by adding plastic in concrete may help to reuse the plastic bag as one of the constituent's material of concrete, to improve the certain properties of concrete.

This project involves a partial replacement of waste plastic as fine aggregates from 5% to 25% with 5% increment. The main objective of the project is to reduce the wastage of plastic and to maintain the eco-friendly environment. The plastic bottles are grinded in grinding machine which passes through 2.36 mm sieve and retained in 1.18 mm sieve in concreting material. The experiment was done with M20 grade concrete for a curing of 7 days, 14 days and 28 days from which its compressive strength and split tensile strength were taken and compared with the conventional concrete.

2BE-CV-A-03 - COMPARATIVE STUDY ON THE STRENGTH PARAMETERS OF FIBRE REINFORCED CONCRETE WITH NORMAL CEMENT CONCRETE

Abhishek K R
Sadhana U S
Savithashree M
Yashaswini K L
Rashmitha

Ms Smitha (Guide)

Abstract

We know that concrete is the mixture made by mixing proportioned fine and coarse aggregate with adhesives by adding water to it. Generally the adhesives used may be cement or lime. The property of this normal concrete may be improved by reinforcing the concrete with steel bars. But what is this Fibre reinforced concrete? What its specialty? How it differs from normal concrete? Etc, are the common questions which may arise in ones mind.

Fiber reinforced concrete can be defined as a “composite material consisting of mixture of cement, mortar or concrete and discontinuous, discrete, uniformly dispersed suitable fibers”. Continuous meshes, woven fabrics and long wires or rods are not considered to be discrete fibers.

Plain concrete possesses very low tensile strength and less resistance to cracking and it is also brittle in nature. Internally concrete possesses micro-cracks inherently, and its poor tensile strength is due to the propagation of such cracks. In the past, attempts have been made to impart improvement in tensile property of the concrete members by way of using conventional reinforced steel bars and also by applying restraining techniques. Although both these methods provide tensile strength to the concrete members, they however, do not increase the inherent tensile strength of concrete itself and also there is no much reduction in the amount of cracks developed.

It has been recognized that the addition of small, closely spaced and uniformly dispersed fibers to concrete would act as crack arrester and would substantially improve its static and dynamic properties. Although several type of fiber has been tried out in cement and concrete, only some of them are effectively and economically used. Each of them has their own characteristic properties and limitations. In this project we will be using steel fiber and coir fiber to study the strength parameters with normal cement concrete.

2BE-CV-A-04- RECYCLE AND REUSE OF KITCHEN WASTER WATER

Varad Baadkar
Thejesh M Shetty
Shamal Ahmed
Pranam Mendon
Rajath Salyan

Ms BHAVYA (Guide)

ABSTRACT

The first experiments on the use of wetland plants to treat waste water were carried out in the early 1950s by Dr. Kathe Seidel in Germany. The first full scale systems have been spreading throughout the world. At present, there are several types of constructed wetlands used for waste

water treatment. Free water surface systems with various types of vegetation free floating, floating leaves, submerged and emergent are used in many countries.

2BE-CV-A-05 - USEFULL APPLICATION OF PLASTIC WASTE IN COMPOSITE BRICK MANUFACTURING

Rajmuni Hombal
Shwetha L G
Mayur B Patil
Sachin Gangoli

Mr. Sudeepa Shetty

ABSTRACT

The consumption of plastic has grown substantially all over the world in recent years and this has created huge quantities of plastic-based waste. Plastic waste is now a serious environmental threat to the modern way of living. Among plastic, Polyethene forms the largest portion followed by Polyethylene terephthalate (PET) .The PET is obtained in massive quantity from bottles most commonly used for packaging of beverages and drinking water. India approximately produces 40 million tons of solid waste of which 12.3% is plastic which is discarded mainly in form of water bottles. Hence the usage of these plastic waste in manufacturing of brick can be done. The use of waste plastic will lead to the reduction in dumping of solid waste and also it will help in increasing the tensile strength of the brick. As the brick is good in compression compared to its tensile strength this method of increasing its tensile strength will be a useful application.

2BE-CV-A-06 - DEVELOPMENT OF COMPUTER PROGRAM SOFTWARE FOR CONCRETE MIX DESIGN

Jevin Maria Dcunha
Hima A G
Jyoti D Melenmani
Prajna Bhandhary
Rachana R

MR.Vikram (Guide)

ABSTRACT

The concrete mix design is repetitive process of detailed calculations. Hence there is considerable amount of time required to get the solution by hand computation. There is a need to find the solution i.e., to make the computation effort less and hence saving in time and energy. The aim of the project is to develop computer software as per latest Indian Standard Code IS 10262-2009. The software is useful for practicing professionals and also for academics and the software also commercially marketed.

2BE-CV-A-07 - DEVELOPMENT OF ECO-FRIENDLY BRICKS USING FLY ASH

Ashish Poojary
Nawaf Aboobaker
Abdul Khader Muzammil E M
Harikrishnan T
Mohammed Mustafa

Supreeth Prabhu (Guide)

ABSTRACT

Fly ash is a fused residue of clay minerals present in coal. The high temperature generated when coal burns in thermal power plants, transforms the clay minerals in coal powder into a variety of fused fine particles of mainly aluminium silicate composition. Pulverized fuel ash commonly known as fly ash. It is a useful by product from thermal power stations using pulverized coal as fuel and has considerable pozzolonic activity. This national resource has been gainfully utilized for manufacture of fly ash-lime bricks as a supplement to common burnt clay buildings bricks leading to the conservation of natural resources and improvement in environment quality. Fly ash-lime bricks are obtained from materials consisting of pulverized fly ash in major quantity, lime and an accelerator acting as a catalyst. Fly ash-lime bricks are generally manufactured by intergrading blending various raw materials are then moulded into bricks and subjected to curing cycles at different temperatures and pressures. On occasion as and when required, crushed bottom fuel ash or sand is also used in the composition of the raw material. Crushed bottom fuel ash or sand is also used in the composition as a coarser material to control water absorption in the final product. Fly ash reacts with lime in presence of moisture from a calcium hydrate which is a binder material. Thus fly ash lime in presence of moisture form a calcium silicate hydrate which is binder material. Thus fly ash lime brick is a chemically ended bricks. These bricks are suitable for use in masonry construction just like common burnt clay bricks. Production of fly ash-lime bricks has already started in the country and it is expected that this standard would encourage production and use on mass scale. This stand lays down the essential requirements of pulverized fuel ash bricks so as to achieve uniformity in the manufacture of such bricks

2BE-CV-A-08 - QUALITATIVE AND QUANTITATIVE ANALYSIS OF FLYASH BLOCKS IN COMPARISON WITH LATERITE BLOCKS

Ananya T
Dalia Elizabeth
Greeshma Chandran
Mithula Prakash

Ms Smitha (Guide)

Abstract

Laterite blocks are always preferred as a building material in tropical regions of our country which has resulted in the extinction of laterite soil and increase in the cost of laterite blocks. The option to mitigate this issue was the use of concrete blocks which uses cement and sand as its main constituent. Concrete has been the most preferred construction material for over five decades. Its demand is rapidly increasing day by day due to its versatility, mould ability, high compressive strength etc but for manufacturing concrete, cement is one of the abundantly used material. The large scale manufacture of cement is creating enormous amount of environmental

issues on one hand and depletion of natural resources in the other hand. It is a well known fact that, production of one ton of cement contributes about one ton of carbon dioxide into the atmosphere in addition to other gases causing global warming.

In this project work, fly ash blocks will be manufactured as that of concrete blocks, using quarry dust as fine aggregates, 6mm downsize coarse aggregates and cement such that the percentage of cement is varied by the addition of flyash. Cement will be replaced by flyash in percentages of 5%,10%,20%,30%,40%,50%,60%,70% and 80%. Further, various parameters like compressive strength, water absorption, shape and edges and cost of each block will be determined. Further the same parameters will be compared with laterite blocks and solid concrete blocks.

2BE-CV-A-09 - DEVELOPMENT OF STABILIZED MUD BLOCKS.

Gladson N V
Vachan M B
Yaseen Bilagi
Sarhan Ahmed

Supreeth Prabhu N (Guide)

ABSTRACT

STABILIZED MUD BLOCKS

Soil as a building material is available in most areas of the world. In developing countries, earth construction is economically the most efficient means for house construction with the least demand of resources. Investigation has to be carried out to find the suitable proportion of locally available materials such as soil , coir , straw etc. with cement as stabilizers for improving the strength of locally available mud blocks and thus to provide affordable housing. Using soil (from areas of Neriamangalam) and stabilizers (cement, lime, straw fibre, coir fibre, plastic fibre), eleven different types of samples were to be prepared. Tests have to be conducted on these samples in order to evaluate their performance such as compressive strength and total water absorption on which the durability of the blocks depend.

2BE-CV-A-11 - EXPERIMENTAL STUDY ON PROPERTY OF CONCRETE BY PARTIAL REPLACEMENT OF CEMENT BY COCONUT SHELL CINDER AND SILICA FUME

U Nagesh Nayak
Vaibhav Shetty
Anil Kumar Nayak
Prajwal Aithal
Shashwath M R

Ms.NAVYASHREE B R (Guide)

ABSTRACT

The ascending in the material expense is the matter of worry in the creating development environment. This increment in the material expense is because of the expanded interest for

material because of expansion in populace and less accessibility. In this manner there is a need to discover elective material that can be supplanted with elements of cement. Analysts are scrutinizing the material to lessen the expense of development likewise to accomplish the better execution. Coconut shell is horticulture waste and its slag can be utilized as an incomplete trade for bond because of its high silica content. Since the expense of concrete is expanding step by step furthermore the interest is high, there is a need to discover elective restricting material that can be supplanted with bond to minimize the development expense furthermore to accomplish quality. This paper basically manages the powerful usage of horticultural waste material as an incomplete substitution for bond in solid creation. The concrete is supplanted with coconut shell cinder and silica fume in the present work. Cement has been supplanted by coconut shell fiery debris.

2BE-CV-A-13 - MODELLING OF WARREN, PRAT AND HOWE TRUSS BRIDGE

Srinidhi P
Yajnesha
Shivaraja Kumar C M
Soujan
Suman Milind Alva S P

Mrs. Nethravathi S.M (Guide)

ABSTRACT

A truss bridge is a bridge whose load-bearing superstructure is composed of a truss, a structure of connected elements forming triangular units. The connected elements (typically straight) may be stressed from tension, compression, or sometimes both in response to dynamic loads. Truss bridges are one of the oldest types of modern bridges. The basic types of truss bridges are Allan truss, Bailey bridge, Baltimore truss, Bollman truss, Bowstring arch truss, Brown truss, Brunel truss, Burr arch truss, Cantilevered truss, Fink truss, Pratt truss, warren truss, Long truss, K truss, Howe truss, queenpost truss, post truss, Truss arch, Waddell truss. Among these truss in this project we have selected 3 type of trusses for the modeling (Warren, pratt, howe).

SECTION 2B

2-BE-CV-B-03 - TESTING THE SUITABILITY OF DEBRIS FOR ATTAINING STRENGTH IN M20 AND M25 GRADE CONCRETE

Prem Kumar T N
Seema Lamani
Rashmi K M
Rakesh Kumar K

Sunil Kumar (Guide)

ABSTRACT

Concrete is a pourable mix of Cement, Water, Fine aggregate & Coarse aggregate that hardens into a super strong building material. Demolition of unsafe buildings and structures commonly take place nowadays. Handling of Construction and Demolition debris has become a challenging issue in all the developing countries especially in India. Availability of fine and coarse aggregate is decreasing day by day. So, the use of recycled fine or coarse aggregate obtained from the Construction and Demolition debris has become necessary. In this project we are replacing natural aggregates with recycled aggregates in making of concrete cubes. Here we are trying to see a pattern of how the strength varies once we replace natural aggregates with recycled aggregates. The percentage of replacement will be 50%, 75% and 100%. The test and design will be as per the specifications provided in Indian standard codes. The concrete cubes are designed for M20 & M25 grade. The compressive strength of recycled concrete will be compared with the conventional concrete. The Results obtained will help in utilization of wastes in constructional activities and thus help in reduction of rate of pollution and conservation of natural resources.

2-BE-CV-B-04 - EFFECT OF USING SEA WATER ON CONCRETE AND IMPROVING ITS PROPERTIES USING FLYASH

Shivani V
Thanvi S
Swathi
Sri Nidhi
Saaketh Jayram

Mrs Deepthishree S Aithal (Guide)

Abstract

Potable water is one of the main ingredient in making conventional concrete and concrete is most widely used around the world in construction activities. Only 2.5% of the world's water bodies are said to be of fresh water and the remaining constitute of sea water. The construction officials in coastal areas have been facing the challenge of building and maintaining durable concrete structures in a salt water environment. Gradual penetration of sea salts and the subsequent formation of expansive and leachable compounds lead to disintegration of structural concrete. Cement is the most costly and energy intensive component of concrete. The unit cost

of concrete can be reduced as much as possible by partially replacing cement with fly ash. Fly ash is available in abundance as a by-product from thermal projects in India. Waste products like fly ash, (which otherwise is hazardous to the atmosphere, may be used as part partial replacement of cement with fly ash and the fly ash) when used in concretes have been known to have higher resistance to chloride ion penetration than concrete made with ordinary Portland cement. In this work, two grades of reference fly ash concrete M20, M25 will be prepared using potable water for mixing and curing. The same grades of fly ash concrete will be prepared again using potable water for mixing and cured in sea water. Once again the same grades of fly ash concrete will be prepared using sea water for mixing as well as curing. Investigation will be carried out for fresh concrete properties and hardened concrete properties on specimens cured for different curing days.

2-BE-CV-B-05 - WATER QUALITY ANALYSIS AND MAPPING USING GIS

Akshith Rai E
Darshan S
Bharath S Shetty
Pratham Shetty

Kavyashree M P (Guide)

ABSTRACT

Water quality is the standard description of the water in terms of physical, chemical, thermal and biological properties. Water quality analysis is carried out in the region of Adyar. In the study of water quality we mainly prefer 6 types of the parameters and the values are taken and is verified by the standard values of the water given by the BIS (Bureau of Indian standards) specifications. Water is one of the major source for the human use, domestic use and also for agricultural and industrial sectors. The quality of water gets affected by the disposal of the wastes from the agricultural and industrial sectors. From the last decades, the standard quality of water decreases day by day, which causes scarcity of drinking water. So, it is very essential to study the quantity and quality of water by analyzing the quality of the water samples taken from the region to different of tests and to determine the spatial variations of the parameters and are marked in map by using the GIS (Geographic Information System) software. GIS is the tool used to strong, analyzing and mapping the spatial variations of parameters in the quality of the water.

2-BE-CV-B-06 - STUDY ON EFFECT OF WIND FORCE ON BRIDGES

EFFECT OF WIND ON A BRIDGE

Saman Ayyub
Suraksha K.M
Saurav Rai
Hruthik H.S.
Abijith

Mrs Deepthishree S Aithal (Guide)

Abstract

Wind is essentially the large scale horizontal movement of free air. It plays an important role in design of tall structures because it exerts load on building. Wind action is represented by simplified set of pressure or forces whose effects are equivalent to extreme effects of turbulent wind. Certain aspects necessary to determine wind actions on a structural are dependent on the location ,availability and quality of meteorological data and the type of terrain. Wind actions are determined from the basic values of wind velocity. And the response of structure should be calculated from the peak velocity pressure. All structures will experience dynamic oscillations due to fluctuating component of wind. In rigid structures these oscillations are insignificant and therefore, can be satisfactorily treated as having an equivalent static pressure. More flexible systems such as tall buildings undergo dynamic response to the fluctuating component of the wind. Apart from tall buildings there are other structural forms such as tall latticed towers, chimneys and bridges that need to be examined for aerodynamic effects.

2-BE-CV-B-07 - SMART CITY PARKING

Sumanth Kumar Shetty
Raksha K S
Sachin Kumar
Pooja V

Mr. Chethan Kumar N T

ABSTRACT

This project is planned for the parking of the vehicles under the pavements near to any public roads. Underground parking helps in reducing the traffic jams which are mainly caused due to the vehicles that are parked on the sides of the roads & thus helps in smooth movement of the vehicles and also avoids minor accidents caused by this traffic. The space above the underground parking can be utilized as service roads, footpaths, etc.

The cost of the construction of the said project would be less when compared to the cost of land because these are made in prime location of the city. But in some places this ideology may not be worthwhile due to the geological conditions of the roads. Although this project will help to reduce the traffic problems, ease the pedestrians' movement and provide parking facility. If this project is scientifically planned, aspects like cabling, rain water movement, drainage etc may be considered to accommodate within this. Thus this project is very helpful for the public.

2-BE-CV-B-08 - REPURPOSING OF USED BEVERAGE BOTTLES IN TO USEFUL BUILDING MATERIALS – GREEN HOUSE.

Sapna
Pushparaj
Priyanka
Chaithresh M

Ms.Navyashree B R (Guide)

Construction work using waste water bottles is an innovative idea for the waste management. One of the governing factors on which the safety of any civil engineering structure depends is the materials used in construction. This project mainly aims to use of waste plastic bottles in the construction of masonry units.

It is difficult to recycle the plastic bottles. Out of mass numbers of plastic bottles consumed throughout the world, most of them are not recycled by certain municipalities. They are end up by lying stagnant in landfills and even if you chop them into tiny pieces they still take more than a human lifetime to decompose.

This experimental investigation mainly deals with the comparison of compressive strength of a masonry block of plastic bottles with brick masonry, solid cement block masonry of equivalent sizes. In the first case, the bottles are filled and compacted completely with soil and in second case bottles are filled with sand and finally comparative study is carried out. All these four kinds of blocks are tested under CTM (Compression Testing Machine) for compressive strength. The specimens are tested for water-cement ratios of 0.40, 0.45 and 0.50. The masonry blocks of plastic bottles are to be tested for different orientations by placing the bottles once upon other and by placing them diagonally. A size of 2x2 bottles is considered for each orientation while making the masonry blocks of plastic bottles. The main objective of the study is to prove that the plastic bottles can replace solid cement blocks in construction.

2-BE-CV-B-10 - A STUDY OF CHARACTERISTIC STRENGTH OF CEMENT CONCRETE USING QUARRY DUST

Prajwal Suvarna
Shanmukhappa
Suratha
Ashwath

Mrs Deepthishree S Aithal (Guide)

Abstract

An attempt is made to investigate the performance of cement concrete using quarry dust (crushed stone dust). The quarry dusts are to be collected from the crusher site . The collected dusts shall be analyzed for particle size distribution and compared with the different zones of fine aggregate as per IS: 383-1970(3). The quarry dust conforming to zone iii is used as partial replacement for fine aggregate in cement concrete mixes.

The grade of concrete used is M20 are designed using different percentages of quarry dust according to guidelines of SP: 23- 1982(2). Normal concretes and concretes with quarry dusts are cast to study the various properties like compressive strength and split tensile strength

The concrete cubes are cast to study 7 days 14 days and 28 days compressive strength. In the experiment, the values of compressive strengths as well as split tensile strength of normal concrete compared with that of concrete with 10%, 20%, 30%, 40% replacement of sand with quarry dust.

From the study we found out that for 30% replacement of sand with quarry dust showed optimum strength (28 days) compared to normal concrete.

2-BE-CV-B-11 - SOLID WASTE DISPOSAL USING COMPOST

Aniketh Rai
Unnikrishnan
Suchan
Sujith

Miss Bhavya P (Guide)

ABSTRACT

A long-term field experiment utilising barley received four different treatments prior to sowing: municipal solid waste (MSW) compost at either 20 t ha⁻¹ (C20) or 80 t ha⁻¹ (C80); cow manure (MA) at 20 t ha⁻¹; mineral fertilizer (MIN) or NPK (400 kg ha⁻¹); and NH₄NO₃ (150 kg ha⁻¹). The effects of these applications on soil enzyme activities and microbial biomass at crop harvest were measured after nine years. In comparison with the control (no amendment) MSW addition increased biomass C by 10 and 46% at application rates of 20 and 80 t ha⁻¹, respectively, while MA treatment increased microbial biomass C by 29%. The ratio of soil microbial C to soil organic C was the lowest at the high rate of MSW application. Oxidoreductase enzymes, such as dehydrogenase and catalase, were higher in the MSW treatments by 730 (C20) and 200% (C80), respectively, and by 993 and 140% in MA treatments than in the unamended soil, indicating an increase in the microbial metabolism in the soil as a result of the mineralization of biodegradable C fractions contained in the amendments. The addition of MSW and MA caused different responses in hydrolase enzymes. Phosphatase activity decreased with MSW ($\pm 62\%$ at both rates) and MA ($\pm 73\%$), to less than those in the mineral fertilization and the control treatments. Urease activity decreased by 21% (C20) and 28% (C80), possibly being affected by the heavy metals contained in the MSW. However, β -glucosidase and protease-BAA increased in all the organic treatments, especially with MA (by 214 and 177%, respectively). This is attributed to the microbial stimulation by the organic C and is correlated with the increase in dehydrogenase.

2-BE-CV-B-15 - ADSORPTION STUDY ON WASTE WATER USING LOW COST ADSORBENTS

Anusha R
Momin Farooqdar
Nikitha J
Shizu Roshin

Mr. Kiran Kumar G.R

ABSTRACT:

Treatment of waste water is a costly process and involves application of various technology to obtain maximum effluent removal .This particular project involves application of a low cost adsorbents prepared from egg-shell and sea-shell by adopting batch process . The current method involves application of low cost adsorbents to reduce the strength of waste water. Adsorption mechanism studies will be done to check the efficiency of the adsorbents. The overall objective of the project is to reduce the treatment cost of waste water.

2-BE-CV-B-16 – USE OF THERMOSET PLASTIC AS WEARING COURSE FOR FLEXIBLE PAVEMENT

Karthik G
Rahul H
Ankush R Bhandary
Dayasurya B.S.

Dileep Kumar U (Guide)

ABSTRACT

It is well known that plastic wastes are non-biogradable and remain on earth for several years. Further some of the plastic waste like thermoset plastic such as vehicle body parts, keyboards, mobile casings, household fixtures, switch boards etc. cannot be removed or recycled and cause environmental issues. Thermosetting plastics are generally stronger than thermoplastic the materials due to three dimensional network of bonds and are also better suited to high temperature applications. In this project an attempt is made to use the thermoset plastic as wearing cause of the flexible pavement. The thermoset plastic wastes are collected and cut into small pieces as per the standards for the wearing course. This plastic is added into the bitumen mix and laid as a wearing course properties of the mix are tested by the material stability test.

2-BE-CV-B-17 – STUDY OF REPLACEMENT OF CONCRETE AGGREGATE BY E-WASTE IN CONCRETE

Kiran M. Hosur
Nithesh Kajava
Sonthosha I.M.
Shashank K.

Ms. Netravathi (Guide)

ABSTRACT

Electronic waste is an emerging issue posing serious pollution problems to the human and environment. The disposal of which is becoming a challenging problem. For solving the disposal of large amount of E-waste material, reuse of E-waste in concrete industry is considered as the most feasible application. Due to increase in cost of normal coarse aggregate it has forced the civil engineers to find out suitable alternatives to it. E-waste is used as alternative for coarse aggregate. The work was conducted on M40 grade concrete mix. The replacement of coarse aggregate with E-waste in the range of 0%, 15%, 10%.

SECTION 3A

3-BE-CV-A-02 - SUITABILITY STUDIES ON USE OF COASTAL SAND IN SOIL STABILIZATION

Aarthi S K
Anjum Baji
Leandra Sonal Monteiro
Maneesha C T

Ms Smitha (Guide)

Abstract

Soil stabilization is the process of improving the properties of soil and thus making it more stable. It may be carried by various methods such as artificial and natural stabilization. Lithomorgic Clay is naturally occurring aluminum silicate composed of primarily fine grained minerals. Lithomorgic clay is problematic to engineers because of its low bearing capacity, high compressibility, shrinking, swelling and swell pressure. A satisfactory additive is used for stabilization of Lithomorgic Clay. One among them is stabilization is using Sand. Here we will be making use of River sand and Sea sand for the stabilization process. Lithomorgic Clay was collected from Karaya, River Sand from Nethravathi River and Sea Sand from Thaneer Baavi beach side. Various tests such as Grain size distribution, Dry density, Optimum moisture content, California bearing ratio (CBR) will be carried out for determination of engineering properties and Index properties. Chemical analysis of sea sand will be carried out to identify the presence of foreign matter disturbing the soil stabilization. The California bearing ratio (CBR) value for different percentages of sea sand and river sand will be determined and then results will be tabulated and computed.

3-BE-CV-A-04 - ANALYSIS, DESIGN AND MODELING OF COUNTERFORT RETAINING WALL

1. Ashoka Nayaka
2. Prasad Raghavendra Rao
3. Athar Ali
4. Mohammad Fahad Ullal

Prof. Purushothama CT (Guide)

ABSTRACT

A counterfort wall is a structure that holds back soil or rock from the landscaping. Designed to prevent downward earth slides and soil erosion, this type of retaining wall can use gravity to hold the structure together. Many are made of masonry, stone, brick, vinyl or railroad ties. Poured concrete can also be used as a counterfort wall. Here's how it works: vertical sections of concrete are married to a larger concrete base. Tied together, you've got a strong, weight-bearing retaining wall. Generally, this type of wall is formed at the manufacturer's site and then delivered for installation.

Reinforced concrete retaining walls are meant to support more height of earth mass. Cantilever retaining wall is constructed up to height of 6 m and above that it becomes uneconomical. To support more height of earth mass advancement is done.

Cantilever retaining wall by adding relief shelf in it. Due to provision of relief shelf the soil pressure on the retaining wall is reduced resulting in improvement in stability of retaining wall. Cantilever retaining wall with one relief shelf is economical up to height of 10 m above that counterfort retaining wall with relief shelf is useful. In this paper analysis and design of counterfort retaining wall with one relief shelf is done for various positions of relief shelf. These results are studied to get minimum earth pressure, more stability and minimum moment in each component of retaining wall. The optimization of counterfort retaining wall is done to get minimum size of retaining wall. Due to this optimization extra formation width is available in hilly areas and excessive cutting is avoided thereby construction cost reduces. Keywords: Counterfort Retaining wall, relief shelf, earth pressure, Factor of safety, overturning, sliding, optimization.

3-BE-CV-A-05 - DESIGN AND ANALYSIS OF MULTI STOREYED BUILDING USING ETABS SOFTWARE

Aseeb Rahman
Abdul Thamsheer
Abdulla M.A
Manjunath D

Mr.Dileep Kumar U (Guide)

ABSTRACT:

In order to compete in the ever growing market it is very important for structural engineers to save time as well optimize the material. The principle objectives of this project is to analysis and design multi storey building using ETABS software's and optimize the design to make it economical. The project involves load calculation and analyses using ETABS software. After analysis the optimum RCC design of the building is done.

3-BE-CV-A-06 - A STUDY ON THE USE OF GEOTEXTILE FOR STABILISATION OF SUB-GRADE.

Mohammed Farhan
Adnan Aslam
Abdul Kader
Ibrahim Munnis

Jayaram (Guide)

ABSTRACT: Connectivity to various different parts of a country is the most important aspect in its development. The main structure of any road consist of pavement and subgrade. The Foundation is structural element of a pavement and is also known as sub-base of the base. Either of bituminous or concrete surfacing maybe be surfaced on the base. The subgrade which acts as a foundation for the pavement provides stability to the pavement. The most important function of subgrade is to provide required strength to the pavement and to achieve this, the subgrade must posses adequate stability under various loading and adverse climatic conditions. The formation of corrugations, waves, rutting and shoving black top pavements are

usually attributed to poor subgrade conditions. Geotextiles, both natural and artificial are useful in bettering the geotechnical properties of sub-soil. These fabrics are used for drainage, erosion control, filtration, as a separator, vegetation support, etc. Geo-textile can be used and maintained cost effectively in numerous fields of civil engineering.

3-BE-CV-A-07 - STABILIZATION OF BLACK COTTON SOIL USING TERRAZYME AND ADDING FLY ASH IN VARIOUS PROPORTIONS.

Akshay Samanth
Ameer Suhail
Sharan Raj
Manush Shetty

Sunil Kumar (Guide)

ABSTRACT

In India about 52 million hectares is covered by black cotton soil. Black cotton soil is very hard when dry but completely loses its strength once they get wet. Civil engineers face several challenges because of this soil. Various methods are introduced to improve its engineering characteristics. One of them is introduction of "FLY ASH" in certain proportion like 0, 10, 20, 30, 40 & 50% of fly ash into certain quantity of Black cotton soil. Fly ash has high potential to improve the engineering properties of expansive soil. Wide spread of black cotton soil has mainly posed problems to the construction activities. Thus introduction of fly ash into this soil mainly exhibits the favourable changes in plasticity parameters such as liquid limit, plastic limit and shrinkage limit. With the addition of fly ash liquid limit and plastic limit decreases favourably and shrinkage limit is enhanced.

Another important additive for stabilisation of black cotton soil is a bio enzyme known as "TERRAZYME". It is the important additive along with fly ash which improves the bearing characteristics of soil drastically. Introduction of Terrazyme shows a significant improvement in index properties of soil such as specific gravity, moisture content, etc... this bio enzyme is an organic liquid which is biodegradable and does not have any harmful effect on environment. These enzymes are also natural, non-toxic, non-flammable, and non-corrosive in nature. Introduction of bio enzyme reduces voids between soil particles which in turn reduces water absorption and thereby maximising the soil compaction.

3-BE-CV-A-08 - EFFECT OF SEA WATER ON CONCRETE STRUCTURAL ELEMENTS

Anoosha
Anusree
Megha

Asst Prof. Manohar K (Guide)

ABSTRACT

Construction in coastal areas have long been facing the challenge of building and maintaining durable concrete structure in salt water environment. Penetration of sea salt leads to the disintegration of structural concrete.

This project describes the effect of sea water on different strength parameters of concrete when it is used as mixing and curing as main ingredient of concrete instead of potable water and examining about its application to the concrete structure. Research on factors affecting

durability of concrete in marine exposures has yielded data that allows practical measures to minimize the likelihood of damage. Further work is needed to fully explain the interacting roles of constituents of cement with the chloride and sulfate ions of sea water. Additional research is also needed to fully appreciate the mechanisms that may accelerate the corrosion of ferrous metal embedded in concrete exposed to the sea.

In the near future, fresh water will be very difficult to get and scarce. It is said that in 2025 half of the mankind will live in the areas where fresh water is not enough. Also, UN and WMO are predicting 5 billion people will be in short of even drinking water. Also, in the present, there are some areas where sea water or chloride contained sand are used as mixing water with or without intension. We believe that the possibilities of using sea water as mixing water in concrete should be investigated seriously.

3-BE-CV-A-09 - STUDY ON STRENGTH VARIATION OF CEMENT MORTAR REPLACING FINE AGGREGATE BY LATERITE

Gouri Digambar Gaonkar
Anusha S.S
Komal
Ashik Shetty

Mr.Manohar .K (Guide)

ABSTRACT

Sand is a well-known building material and has occupied a very important place in construction work but Sand is more expensive because it is more difficult to collect sand from rivers. With the fast depleting state of natural resources like river sand and aggregates, it is time to look for alternative cheap materials (marginal materials) for making concrete, particularly when strength is not a primary parameter. One of the potential marginal materials for use in mortar is laterite and sea water. This paper presents the results of the laboratory tests carried out to investigate the suitability of using laterite as partial replacement of sand by adding a sea water in the mixing of mortar. At the rate of 0%, 15%, 30% by weight, to determine the cube compressive strength after 7 and 28 days of curing.

3-BE-CV-A-12 - POROUS PAVEMENT PROJECT

Kumar P
Maruthi GH
Mahesh
Bhimshetty

Chethan Kumar N T (Guide)

ABSTRACT:

This invention relates to a porous pavement for parking spaces, roadways, or streets, airfield runways and the like and it provides a porous pavement for such surfaces which allows water to pass through at a high absorption rate, thereby reducing water run-off and reducing flooding, and also allows pollutants to pass through the pavement to the sub-soil, reducing to a great extent the run-off of polluted water to lakes, rivers, bays and oceans. The invention comprises a paving admixture of aggregate, cement and a liquid adhesive mixture to ensure a firm pavement

surface and at the same time providing voids or openings between the aggregates in the material to allow water to percolate there through

3-BE-CV-A-13 - STUDY OF TUNNELS AND SHAFTS IN PUMPED STORAGE UNDERGROUND POWER PROJECT

Amrutha M
K M Dhanyashree
Muhammed Shiyabuddeen
Mithun Kumar

JAYARAM (Guide)

ABSTRACT:

Power generation by conventional and non conventional methods is becoming popular now to solve the power crises facing the country. Hydro power, Thermal power, and nuclear power are conventional method of power generation and solar, wind, bio gas method are non conventional method of power generation. Excluding the above two methods some optimization methods have been developed by utilizing already available source of power. One such method is harnessing of power by pumped storage method by using the surplus base thermal energy during non peak demand of power. Hence it has been proposed to study the civil engineering components involved in the pumped storage hydro electric project such as tunnels, adits, surge shafts, pressure tunnels, head race tunnels, tail race tunnels, power cable shaft and ventilating shaft involved in the pumped storage hydro electric project.

3-BE-CV-A-15 – AN EXPERIMENTAL INVESTIGATION ON LATERITE SOIL STABILIZED WITH ARECANUT COIR AND CEMENT

Mohammed Akram
Kanishka M.G.
Mohammed Rashid
Abhilash S. Amin

Ms. Smitha (Guide)

Laterite soil is used as sub grade in road construction in almost all areas of D.K. These soil are mixed with silts and claying soil. Such soils have low CBR values. The proposed work includes attempt to increase the strength of laterite soil by using arecanut coir.

SECTION 3B

3-BE-CV-B-01

3-BE-CV-B-02 - PLANNING SUSPENSION BRIDGE FROM TANNIR BHAVI BEACH TO SULTAN BATTERY

Neha Shetty
Ruhi Zubair
Preksha Thej
Rahul Rao

R.Jayaram (Guide)

ABSTRACT

A slew development have helped Mangalore become one of the most sought after residential catchment areas in south India. It has the connectivity by all means like air , water and land. The city of Mangalore which was once known to be a peaceful town, has seen strides in development which has also increased the population of Mangalore city in to multifold and for entertainment only limited places are available. So for the welfare of the Mangalore peoples we have to develop and improve the available places around city to accomodate the growing needs of the Mangaloreans in respect of entertain ment. Hence one such improvement project is taken up to provide facility for easy accessibility to Tanner bavi beach from Sultan battery ,Bloor (Manglore). At present the

Tannerbavi Beach is en circuitious to Mangalore citizen and to reduce time and distance it is studied there is shortest distance between Tanneer bavi beach and Sultan battery. There is a boat facility at present and huge demand for boat during holiday seasons .Hence this project is proposed for the benefit of Mangalore citizens to provide suspension bridge between Sultan battery and Tanner bavi beach for giving shortest and easy approach to Tanner bavi beach by happy walking along suspension bridge.

3-BE-CV-B-03 - PROPOSAL FOR FLYOVER AT NANTHOOR CIRCLE

Rachel Melrose Sequeira
Sharadhi P.
Soniya S.
Akhil A.

Ms Kavyashree M P (Guide)

ABSTRACT

A slew development have helped Mangalore become one of the most sought after residential catchment areas in south India. It has the connectivity by all means like air , water and land. The city of Mangalore which was once known to be a peaceful town, has seen strides in development which has also increased the density of vehicles on the roads of mangalore which often witness traffic snarls making situation worse. The main roads in Mangalore are the K S Rao Road which runs through the center of the city and Falnir Road which runs in the south of the city ; other prominent roads include Hampankatta, Pumpwell, Kankanady, Padil, Yekkur, Bikarnakatte and Nanthoor. While the city of Mangalore has heavy rush-hour traffic on these

roads , the volume on some roads can reach stifling levels , Even during “off” hours to which the zig-zag streets adds in more elements. The Nanthoor Circle being one of the most busiest junctions has caused a lot of inconvenience in the motion of traffic. Therefore the introduction of a flyover could be a solution to this major problem. A flyover(also called an overpass) is a bridge that carries one road or railway line above another either with or without subsidiary roads, for communication between the two.

3-BE-CV-B-04 - VENTED DAM DESIGN AND MODELLING

Varun Vikas Rai
Pavanesh C.V.
Navyashree
Stheethi K.A.

Purushothama C.T. (Guide)

ABSTRACT

Tropical rivers are predominantly seasoned in nature and managing water resources during the deficit period is becoming more difficult because of the rapidly increasing demand for water. The present investigation focusses on harvesting river water through a series of vented dams. A brief hydraulic design of a vented dam at a specific location is presented. The spacing and capacity of these reservoirs were worked out on the basis of dam height and the river characteristics.

3-BE-CV-B-05 - SPECIAL STIRRUPS TO INCREASE THE SHEAR STRENGTH IN PARTIAL BEAMS

Sachin K.S.
Vinayak Devu Palgar
C.S. Darshan
Murigeppa Chidanarda Angadi

Purushothama C.T. (Guide)

ABSTRACT

Two important properties of RC beams and slabs are flexural and shear strength. The journal papers has shown that the ultimate strength of hollow beams and slabs is approximately equal to homogenous or solid beams and slabs, but the initial crack load is less in hollow beams and slabs. Partial beams are one of the solutions to reduce the use of cement in construction that leads to the reduction of CO₂ emission. Also it helps to usage of some waste materials those harm the environment. To overcome the problem of shear special stirrups are to be designed.

3-BE-CV-B-06 – COMPARATIVE STUDY OF SLUM REHABILITATION USING RAPID WALL

Numan Sheikh Ahmed
Riyaz Ahamad
Vishnu T.N.

Mohammed Hasan Nishan

Mr. Krupaksha H.K. (Guide)

ABSTRACT

There is a huge growing requirement for building materials in India due to existence of shortage of 24.7 million units mainly for low income groups in urban India. Thus total estimated housing shortage for urban and rural India in 2012 is 68.5 million units. To meet this challenge, India requires innovative energy efficient building materials for strong and durable housing. Rapid wall panel provides rapid or faster construction and contributes for environmental protection. Providing a solution to many above issues and concerns.

3-BE-CV-B-07

3-BE-CV-B-08

3-BE-CV-B-09 - COMPARATIVE STUDY ON BASIC PROPERTIES OF DIFFERENT TYPES OF MODIFIED BITUMEN

Harshith
Yogesh B.R.
Abishek B.Y.
Annappa R.

Mr. Krupaksha H.K. (Guide)

ABSTRACT

As the technology is growing year by year there is need to upgrade the materials and methodology used for construction of any structure and roads, presently conventional bitumen is used in construction of roads, which is very costly. We can reduce the cost by replacing the bitumen by modified bitumen like crumb rubber modified bitumen to check the strength parameter and basic tests on bitumen, bitumen properties comparative study on that.

3-BE-CV-B-10- CAPACITY ESTIMATION OF NH-75 IN FRONT OF SAHYADRI COLLEGE

Akshith K.
Harshith K.G.
Mohammed Suhail Khan L
Suman B.

Mr. Krupaksha H.K. (Guide)

ABSTRACT

As the number of vehicles are increasing every year, the congestion and the traffic jamming problem are increasing which is disturbing the continuous flow of traffic and consumption of fuel

is increasing. By studying the capacity characteristics of NH-75 we can access the required road width and other traffic facilities by counting number of vehicles or traffic survey for 3 to 7 days and by using Chandra's method of estimating road capacity for finding out the NH-75.

3-BE-CV-B-11

3-BE-CV-B-12 - STUDY ON FEASIBILITY OF ROAD CONSTRUCTION BY USING WBM AND WMM

Rajeshkumar Rao N.
Sahan A
Suhas Hegde
Vachan Shetty

Mr. Sudeep Shetty (Guide)

ABSTRACT

In India road transport is more crucial without flexible pavement. WBM (Water Bound Macadam) road construction is one type of flexible pavement and it uses broken stones as base and surface course. Due to the pavement base course made of crushed or broken aggregate we call it as macadam and it mechanically interlocked by rolling and voids are filled with screening and binding materials along with water. By applying bituminous layer above WBM will support for faster moving vehicles. This flexible pavement in WBM have multiple layers of materials and each layer receives load from above layer and spread it out, then passes it to next layer. WMM (Wet Mix Macadam) road construction is premixed in concrete mixing machine and then brought to the site for overlaying and rolling.

WBM is superior in quality because materials are carefully graded and resulting mass is almost void less compacted mass. The interlocking of aggregate particles imparts adequate strength of materials selected for filling the voids. WBM is less costly than WMM and bituminous base course. WBM uses stone aggregates, screenings and binding materials, meanwhile in WMM only stone aggregates and binding materials. WBM road services only for a short time but it takes longer time for construction.

3-BE-CV-B-13 – CAPACITY VARIATION OF ROAD WITH RESPECT TO WIDTH OF NATIONAL HIGHWAY – 75

Sumanth Shetty
Shailesh Kumar
Naveen Shetty
Subrahmanya S. Mukri

Mr. Krupaksha H.K. (Guide)

ABSTRACT

To decide the number of lanes for the road. The capacity of road is very much needed. As the capacity of road changes @ diff changes of road, hence the study must be conducted to find the capacity @diff points. For the present study 2-3 points are selected and by using Chandra's method assessing the capacity and finding the variation with respect to width of road.

3-BE-CV-B-14 - USAGE OF WASTE GLASS AS FINE AGGREGATE IN CONCRETE

Vinaya Chandra
Sanith
Dhanraj Devadiga
Manikantha
Akarsh Rai

Ms. Geetha S.D. (Guide)

ABSTRACT

Glass is widely in our lives through manufactured products such as sheet glass from bottle, glassware and vacuum tubing. Glass is an ideal material for recycling. Use of recycled glass helps in energy saving laboratory experiments were conducted to further explore the use of waste glass as coarse and fine aggregates for both alkaline-silica reaction. alleviation as well as decorative purpose in concrete. The study indicates that the glass can be effectively be used as fine aggregate replacement (40%) without substantial change in strength.

SECTION MTCV

MTCV-01 - MUD HOME CONSTRUCTION WAY TOWARDS GREEN BUILDING TEAM MEMBERS

Chiranth Bore
Madhav V. Prabhu
Smilu Kalarikkal

Sudeep Shetty (Guide)

ABSTRACT

Earthbag construction is an inexpensive method to create structures which are both strong and can be quickly built. It is a natural building technique that evolved from historic military bunker construction techniques and temporary flood-control dike building methods. The technique requires very basic construction materials. Standard earthbag fill material has internal stability. Either moist subsoil that contains enough clay to become cohesive when tamped, or an angular gravel or crushed volcanic rock is used. Walls are gradually built up by laying the bags in courses forming a staggered pattern similar to bricklaying.

The walls can be curved or straight, domed with earth or topped with conventional roofs. Curved walls provide good lateral stability, forming round rooms and/ or domed ceilings like an igloo. Buildings with straight walls longer than 5 m (16.4 ft) in length need either intersecting walls or bracing buttresses or piers added. International standards exist for bracing wall size and spacing for earthen construction in different types of seismic risk areas. Until more complete structural testing is available to correlate earthbag bracing need and performance to adobe, cement-stabilized buttresses and mortar anchors to hold barbed wire at stress points can be used for public buildings in high seismic risk areas.

MTCV-02 - FLYASH BRICKS

Praveen S.
Sharanabasava
Shweta N T

Mr.Sunil Kumar (Guide)

Abstract

Brick is building material used to make walls, pavements and other elements in masonry construction. Traditionally, the term brick referred to a unit composed of clay. A brick can be composed of clay-bearing soil, sand, and lime, or concrete materials. Bricks are produced in numerous classes, types, materials, and sizes which vary with region and time period, and are produced in bulk quantities. The advantage of bricks it can increase the thermal mass of building, it also gives increased comfort in heat in summer and cold in winter. Brick is also a very good heat resisting material and thus will provide good fire protection.

The output of the brick has changed enormously from past two centuries. In India normally clay bricks are used clay bricks in construction industry will lead to extensive loss of fertile topsoil. This could be devastating environmental hazard and also high demand for clay bricks would result in price hike of clay bricks. To keep the cost of building materials in reasonable range opt

in for alternative building material like fly ash bricks, calcium silicate bricks and hollow or solid bricks. Making use of fly ash bricks could slow down the rate of deforestation. Fly ash is obtained as waste material in large quantity in thermal power plant and it creates environmental pollution problem. Hence its utilization as main raw material in the manufacture of bricks will not only create enough opportunities for its proper and useful disposal but also help in environmental pollution control to a greater extent in the surrounding areas of power plants. Fly ash bricks manufactured using high end pre-programmed hydraulic machines. Bricks from these machines are tested for its quality and durability. Flyash bricks normally have more compressive strength than normal bricks. Fly ash is also less porous, absorbs very little water and also keeps building strong during rainy seasons

MTCV-03 - PRECAST CONCRETE HOOKING PANELS

Nisarga M.S.
Ratan Shet
Suraj K S

Mrs. Deepthishree S Aithal (Guide)

Abstract

The precast concrete shear wall system is very important for construction due to economic advantages in the speed of construction. The connections between panels are extremely important since they affect both the speed of the erection and the overall integrity of the structure. The experimental study of shear transfer in precast concrete wall panels using dowel action and shear friction concept can be studied by considering the horizontal connection of walls as per Indian standard code. A panel of dimension 500mm x 400mm x 100mm and M35 grade of concrete will be used. An equation relating the transfer of loads through shear friction action to dowel action, to obtain a connection to resist both gravity loads and lateral shear and also to validate the wall panel connection using dowel bar by conducting push off test will be conducted. The dowel bar is provided with a diameter of 12 mm to connect the two panels. The development length (L_d) of the bar is provided with varying size as 300 mm, 400 mm, 600mm and the behavior of the connection will be studied.

MTCV-04 - 1-MT-ST STUDY OF COMPRESSED STABILIZED EARTH BLOCKS

Godwin Fernandes
Raksha K
Kavya N

Ms. Ramya. K (Guide)

ABSTRACT

In the growing concern of awareness regarding sustainable building material and environmental issue, Compressed Stabilized Earth Block (CSEB) gives the view of energy efficient, cost reduction and environmental friendly building materials, overall contribution on the sustainable development. Different research workers have contributions on the Compressed Stabilized Earth Blocks in terms of different parameters. CSEBs are eco-friendly and as these blocks are unburnt products, during production no coal or burning material is needed. So, it does not

produce any harmful gases during production. Highly compressed unburnt blocks have been prepared in the laboratory with different composition and varying proportions of sand, clay and stabilizers such as lime, cement etc. Fly ash is also used as stabilizer in replacement of cement. The strength of different blocks are determined and compared to find the composition which gives highest strength and also to compare between different blocks to get the optimized composition and proportion in terms of economy and strength.

MTCV-05 - 1-MT-ST PRECAST BEAMS AND PURLINS

Abdulrehman Affan
Kavitha Shetty
Navya Rai D.

Mr. Dileep Kumar U (Guide)

ABSTRACT

Precast concrete is a construction product produced by casting concrete in a reusable mold or "form" which is then cured in a controlled environment, transported to the construction site and lifted into place. In contrast, standard concrete is poured into site-specific forms and cured on site.

A precast concrete structural system offers many advantages over in-situ casting. For example, greater control over the quality of materials and workmanship, improved health and safety (with casting carried out at ground level rather than at height) and cost efficiency (with standard forms continually re-used) are all realized through the off-site production of structural elements. As a result, a large body of research has been conducted into their performance, with many national codes of practice also devoting specific sections to design and detailing.

Concrete technology is continually evolving, as is the industry's knowledge of how to model and predict the behavior of the resulting structural components. In this project, the numerical and experimental investigations undertaken as part of this study have been specifically focused on quantifying the advantages of utilizing beneficial alternatives. Specifically the research has looked at improvements in concrete mixes, lightweight aggregates and reinforcing strategies, for precast structural elements required to transfer loads both vertically and horizontally.

MTCV-06 - 1-MT-0 WASTE SLAG BRICKS

Kavyashree
Abhilash H.P.
Nithin B.H.

Ms Smitha (Guide)

Abstract

India has witnessed a tremendous change in the phase of construction especially in building material sector. Traditional materials like stones, bricks etc., have started disappearing from the construction sites due to the reasons well known. These materials are being replaced by concrete blocks, fly ash bricks and others. Today, waste materials generated from industries are causing serious hazards towards the environment. Disposal of these materials has become a major concern otherwise these materials occupy huge fertile land for storage. Materials like fly

ash, slag, mining rejects etc. have been identified as potential sources for use in infrastructure projects and building materials like concrete blocks, bricks etc. Therefore attempts are being made to use some of these materials in construction industry with advantage over conventional materials and thus supporting sustainable development. In this project, emphasis will be given to produce building bricks using waste products of industries like cement slag having properties better than that of conventional materials, with simpler manufacturing procedure, assured supply and providing an efficient method of reusing cement slag which otherwise would occupy large spaces and interfere with the environment. This involves the analysis of properties of bricks, their proportioning and studies as per requirements of IS as a building material to replace traditional brick in infrastructure projects as an environment friendly, cost effective alternative building material.

MTCV-07 - 1-MT-0 FERRO-CEMENT ROOFING CHANNELS

Anusha.k
Shibin R Nambiar
Lijin K V

Mr. Manohar K (Guide)

Abstract

As a result of uncontrolled population growth, housing shortage is a recognized problem in our country .India has witnessed a tremendous change in the phase of construction especially in building materials sector.Use of ferrocement roofing channels not only provide a cost-effective solution to address this problem but also helps to provide with an immediate solution as it is fabricated elsewhere .hence it can be put to immediate use after its fabrication . Quality of ferro-cement works are assured because the components are manufactured on machinery set up and execution time at work site is less. Cost of maintenance is low. Ferrocement is a construction material consisting of wire meshes and cement mortar. Applications of ferro cement in construction are vast due to the low self weight, lack of skilled workers, no need of framework etc. Ferrocement channels are pre-cast shell units made with rich cement mortar (1:2 - 1: 3) and reinforcement consisting continuous layer of chicken mesh with steel bars provided at 2 ends of the channel. These shells units are cast either manually on a masonry mould or mechanically on steel moulds mounted on table vibrator. The channels are supported on ends either on load bearing masonry or on a frame structure.

MTCV-08 - MANUFACTURING OF ECONOMICAL HIGH STRENGTH LIME SAND BRICKS FROM ECO-FRIENDLY MATERIALS

Lankesh Kumar K S
Biradar Praveen
Harshith M.

Mr. SUPREETH PRABHU (Guide)

ABSTRACT

The chemical reaction of calcium hydroxide with silica at high temperature and pressure forms the basis for the production of sand-lime bricks. The principal requirements of the lime and sand are that both should be sufficiently reactive to yield a binder (calcium silicate hydrate) of sufficient quality at competitive costs. The reaction velocity, the formation of the binder, and the

properties of the sand-lime products were found to depend on many factors: - Raw materials (composition and reactivity) including SiO₂-source: quartz, sand, fly ash, shale fines, slag, etc.; the CaO-source: lime, cement, mixtures of lime and cement, etc.; added modifiers, accelerators. - Preparation conditions: slaking, mixing, water content and moulding pressure. - Autoclaving conditions: pressure/temperature, time of autoclaving. The usual autoclave pressure in the industry lies between 64 to 120 bar • h. In recent years there has been a trend to reduce the autoclaving pressure while retaining standard properties. The aim is to lower the cost and increase the life time of the autoclaves in old plants. A review is given of the current knowledge and hypotheses concerning the compositions and structures of raw materials and of the resultant reaction products in relation to the properties of sand-lime products.

MTCV-09 - 1-MT-ST LOW COST PREFABRICATED FERROCEMENT TOILETS FOR RURAL AREAS

Rudramuni K.M.
Ranjan Pavan B.
Yallangouda

Prof. Umesh S. S. and Mr. Sunil Kumar K. (Guide)

ABSTRACT

The use of ferrocement in pre-fabricated toilets provides many advantages in terms of weight (since its thickness usually between 10 mm to 50mm), ease of handling, low labour cost in its production and a durable material requiring little maintenance. This would further lead to eco-friendly low cost toilets without any loss of structural integrity. Saving in cost is one of the several reasons for the popularity of ferrocement. It is recognized that the economics of ferrocement is dependent on several factors such as costs of raw material and labour, and the relative cost of competitive materials.

Pre-fabrication is the practice of assembling components of a structure in a factory or other manufacturing site, and transporting complete assemblies or sub assemblies to the construction site where the structure is to be located. Pre-fabrication saves engineering time on construction site in civil engineering projects.

The main objective of this project is to build low cost toilets under swachh bharat mission and thereby helping the society.

MTCV-10 - WIRED ROOFING SYSTEM

Manikanta P. V.
Indrani V.

Mr. Umesh. S. S.

ABSTRACT

The cost of construction is rising day by day due to increasing cost of basic building materials such as steel, sand, cement, brick, timber and labour. The cost of construction using conventional building materials and construction techniques are not economical particularly for low income groups of population as well as middle income groups. Therefore there is a need to develop a cost effective construction technique either by up-gradation conventional technique or by applying new technique. Therefore wired reinforced roofing system is introduced to reduce the construction cost of the building or roofing system. This roofing system is designed such

way that it is easy to cast, cure & then manually erected over a bearing walls. Hence it is ideally suited for low cost housing espiscally for low class group and for village people.

MTCV-11 - 1-MT-ST MARBLE SLURRY BRICKS

Tousif Shabbir Gheta
Naveen Kumar Naik B N
Vikas H V

Mrs. Nethravathi S.M (Guide)

ABSTRACT

Marble industry has grown significantly in the last decades. The wastage of marble industry are responsible for many environmental problems, because 70% wastes and only 30% recovery of main product contribute to the maximum wastes which are indestructible. The only industry which can consume marble slurry at so large level is only the construction industry.

Marble wastes of different sizes are used in the manufacturing of concrete bricks, with full replacement of conventional coarse aggregate with marble scrapes and slurry powder. The produced bricks are tested for physical and mechanical properties.

Indian environment society, Delhi states that marble bricks has 91.2kN/mm² compressive strength that is 2.5 times more than the traditional red bricks, also due to non inflammable and inorganic raw material, marble bricks are fire resistant.

EC

SECTION 2A

2BEEC-A01 – AUTOMATED SYSTEM FOR AIR POLLUTION DETECTION AND CONTROL IN VEHICLES

AIR POLLUTION DETECTION IN VEHICLES

Impana.S.Shetty
Ananya.Shetty
Pooja
Dhanyashree

Mr.Prasanna.Kumar.C (Guide)

ABSTRACT

Every vehicle has its own emission of gases, but the problem occurs when the emission is beyond the standardized values. The primary reason for this breach of emission level being the incomplete combustion of fuel supplied to the engine which is due to the improper maintenance of vehicles. This emission from vehicles cannot be completely avoided, but it definitely can be controlled. The aim of the project is to monitor and control the pollutants in the vehicle by using the pollution control circuit. This pollution control circuit consists of various sensors like smoke sensor, temperature sensor and GSM, GPS kind of devices, and all of them are integrated and connected to a ARM 7 processor. When a vehicle attains certain threshold pollution level then the engine gets automatically switched off and an SMS is generated and sent to the pre-defined number stored in the memory through the GSM module. This abstract demonstrates an effective utilization of technology by which we save our environment by controlling the pollution of vehicles.

2BEEC-A02 - VEHICLE PARKING SYSTEM

Kirti Ullas Shenvi,3rd sem,EC
Megha C,3rd sem,EC
Jasna,3rd sem,EC
Manish S,3rd sem,EC

Mrs.Nikhitha C (Guide)

ABSTRACT

This project can be used in companies & shopping malls. Here we assume that some vehicle has to be parked in some slot, it becomes difficult to search every vacant slots. In this project we have a display board which shows the information about vacant slots. This vacancy is sensed by IR Reflectance Module which is placed in the parking slots. The vacant slot is displayed according to the priority concept. Once the vacant slot is known then the code for it is typed by the mobile of the owner which is then decoded using the DTMF decoder. The vehicle is controlled by the microcontroller. After pressing the code the vehicle then moves automatically using the motor fixed to it according to the inbuilt measured distance of each slot.

Then the vehicle is parked at the vacant slot. After the vehicle is parked in the vacant slot it intimates us that the vehicle is parked safely using GSM module.

2BEEC-A03 - ALCOHOL DETECTION IN VEHICLES

Alka Deepak
Ann Thomas
Bhakthi R Pakkala
Hemashree

Mrs.Nikhitha C (Guide)

ABSTRACT

Drunk driving is the reason behind most of the deaths, so the drunken driving detection with car ignition locking using raspberry pi aims to that with automated, transparent, non-invasive alcohol safety check in vehicles. This system uses raspberry pi with alcohol sensor, DC motor, LCD display circuit to achieve this purpose. The system constantly monitors the sensitivity of alcohol sensor for drunk driver detection. If driver is drunk, the processor instantly stops the system ignition by stopping the motor. If alcohol sensor is not giving high alcohol intensity signals, system lets engine run. Raspberry pi processor constantly processes the alcohol sensor data to check drunk driving and operates a lock on the vehicle engine accordingly.

2BEEC-A04 - AUTOMATIC DELIVERY BOT

M.Sivanesh
Mohammad Afridi
Mohammad Shandar
Nowzish.M

Mr. Praveen Kumar M (Guide)

ABSTRACT

Today when we want something in between when the class is going on, you get your things done either from lecturer or by any student which is a time waste either to lecturer or students. All the deliveries will be made from 'local delivery point' which may vary depending upon the blueprint of the floor.

Once the lecturer has entered the class, it is very difficult for him/her to make any contact with non-teaching staff's. So to overcome that problem, we will be installing a system called as "Push to Deliver System" which will send a signal to the delivery bot to deliver the necessary things. The bot receive the signal and analyse the incoming signal and choose an appropriate path to deliver the necessaries for a class room. These things will be already kept in the space provided on the bot. Bot can carry up to 2 chalk box, 2 duster, 3 marker pens , some red ink pens, projector remote and A/C remotes.

2BEEC-A05 - GAS LEAKAGE DETECTOR WITH SOUND ALARM

Aashlesh.K.
Anusha.U.L.,
Deekshith
Nishmitha

Mr. Savidhan Shetty (Guide)

ABSTRACT

Gas leakage is a serious problem both in domestic and industrial scale. Sometimes people can't detect the leakage just due to its smell. There are inflammable gases without a smell. Annually many gas disasters occur due to carelessness of humans. This can be prevented if there is just a alarm to warn the people and better a SMS system where a message like " Gas leakage detected" is sent to particular concerned number. Further it can be extended so as to warn the fire services if a disaster takes place.

2BEEC-A06 - AUTOMATIC DIM TIP

Abdul Kkhadar Hamdan
Shyla Shenoy
Nitila Jogi
Kalpitha

Mr. Gurusiddayya (Guide)

1. PROJECT OBJECTIVES – The main objective of the study is finding a solution for accidents which occur in most of the cities.

2BEEC-A07 - SOLDIER HEALTH AND POSITION TRACKING SYSTEM

Mahammad Faisal
Ajay Prajwal Crastha
Harsha Kumara
Harish Rai

Mr. Savidhan Shetty

ABSTRACT:

The soldier Health and Position Tracking System allows military to track the current GPS position of soldier and also checks the health status including body temperature and heartbeats of soldier. The System also consists extra feature with the help of that soldier can ask for help manually or send a distress signal to military if he is in need. The GPS modem sends the latitude and longitude position with link pattern with the help of that military can track the current position of the soldier. The system is very helpful for getting health status information of soldier and providing them instant help.

2BEEC-A08 - THEFT INTIMATION OF THE VEHICLE OVER SMS TO OWNER WHO CAN STOP THE ENGINE REMOTELY

Prajna K
Kavana K
Muthu Deepa
Prajna K

Praveen Kumar M (Guide)

ABSTRACT

The main motto of the project is to use the wireless technology effectively for the automotive environments by using the GSM Modem used in sending sms in case of theft intimation. The main scope of this project is to stop the engine of an automobile automatically. When someone tries to steal the car, microcontroller gets an interrupt and orders GSM Modem to send the sms, the owner receives a SMS that his car is being stolen then the owner sends back the SMS to the GSM modem to 'stop the engine'. The control instruction is given to the microcontroller through interface, the output from which activates a relay driver to trip the relay that disconnects the ignition of the automobile resulting in stopping the vehicle.

2BEEC-A09- TSAR (Tactical Search And Reconnaissance) Bot

Abhishek Kumar
Abhishek U.
K Chirag Rao
Anirudh Kotary

Mr. Sharathchandra N R (Guide)

ABSTRACT

India's defence budget has increased substantially but we rely on foreign vendors for critical drones which can be made indigenously . TSAR is a fully automated drone which can be used for surveillance and rescue .TSAR operates on soldiers hand gestures therefore the soldier is free from using bulky joysticks and can effectively use his time for combat. TSAR avoids fratricide rate therefore reducing the risk on a soldier's life. TSAR conducts reconnaissance and provides live video feedback to the operator(display unit) thereby giving them a complete demography of the area and location of the targets . TSAR is an amphibian robot therefore can deal with land as well as water. The robot has an undeniably small size therefore it can stealthily collect data for the operator. it has a dedicated trigger area which can facilitate electronic bombing circuits which can take out terrorists using suicide bombing techniques (only IF MoD authorised).

2BEEC-A10 - Home Automation System (HAS) using Android for Mobile Phone

Akshay Kumar

Azariya
Lathish Kumar A.
Madhurya Mallik C.M.
Kaushitha K.S.

Mrs. NIKHITHA C (Guide)

ABSTRACT– Automation of the surrounding environment of a modern human being allows increasing his work efficiency and comfort. There has been a significant development in the area of an individual's routine tasks and those can be automated. Home Automation System (HAS) has been designed for mobile phones having Android platform to automate an 8 bit Bluetoothinterfaced microcontroller which controls a number of home appliances like lights, fans, bulbs and many more using on/off relay. This paper presents the automated approach of controlling the devices in a household that could ease the tasks of using the traditional method of the switch. The most famous and efficient technology for short range wirelesscommunication- Bluetooth is used here to automate the system. The HAS system for Android users is a step towards the ease of the tasks by controlling one to twenty four different appliances in any home environment.

2BEEC-A11 - 'ATHENA'

Aashish U S
Chaithan
Nidhi Rai D
Aysha Shifa

Mr. Praveen Kumar M (Guide)

Abstract

Everybody loves their car and there are some who look after their car with an affection as that is given to their children. But when it comes to case where in which their car is stolen and then they just end up posting a complaint in the police station. On an average every year about 7,00,000 vehicals get stolen in US. In fact a car is stolen for every 45 seconds.And also another problem faced by the drivers is parking a car in the parking lot. So we have come up with this proposal of our project "ATHENA" (which means The Godess of Wisdom). This is a system which helps the car owner to track his lost car and also for the driver to park the car safely without having any chances of colliding with the obstacle present at the rear end of the car.

2BEEC-A12 - WIRELESS GESTURE CONTROLLED ROBOTIC ARM USING ACCELEROMETER

Chidanand CH
Karthik PT
Nishmitha
Harish Kudtholkar

Dr. Ashwath Rao (Guide)

ABSTRACT

It is a model to control robotic arm through human gestures using accelerometer. Here one only needs to move hand to control the robot. A transmitting device is used in your hand which contains RF Transmitter and accelero-meter. This will transmit command to robot so that it can do the required task like moving forward, reverse, turning left, turning right and stop. All these tasks will be performed by using hand gesture.

2BEEC-A13 - AUTO METRO TRAIN TO SHUTTLE BETWEEN STATIONS

Manikanta.M.N.
Kalandar.D.R.
Chethan Kumar
Avinash

Mr. Prasanna Kumar.C (Guide)

Abstract:

This project is designed to demonstrate the technology used in metro train movement which are used in most of the developed countries. This train is equipped with a controller that enables the automatic running of the train from one station to another. This proposed system is an autonomous train and it eliminates the need of any driver. Thus, any human error is ruled out. In this project ARM 7 has been used as CPU. Whenever the train arrives at the station it stops automatically, as sensed by an IR sensor. Then the door opens automatically so that the passengers can go inside the train. It is equipped with a passenger counting section, which counts the number of passengers leaving and entering the train. There should be a passenger limit for example 10 passengers is the limit – after 10 passengers getting into the train the doors will be automatically closed. The door then closes and the train starts after a pre-scribed time (there will be a time set already as to how many minutes the train will stop at every station) set in the controller by the program. The passenger counts and the stations are displayed on a LCD display inter-faced to the ARM 7. The movement of the train is controlled by a motor driver IC interfaced to the ARM 7. The train incorporates a buzzer to alert the passengers before closing the door and also warn them before starting. As the train reaches the destination the process repeats thus achieving the desired operation. Further the project can be enhanced by making this system more advanced by displaying the status of the train over alert display unit for the convenience of the passengers. The status of the train consists of the parameters like, expected arrival and departure time etc.

2BEEC-A14 - PREPAID ELECTRICITY BILLING AND POWER FLOW CONTROL USING GSM MESSAGING TECHNOLOGY.

Prajna Shetty
Madhura. B.S.
Akshatha
Kavana T Gowda

Dr.Jose Alex Mathew (Guide)

ABSTRACT:

It is known fact that every home has electric power supplied by Electricity Power Corporation. The consumer is charged for the electric power consumed on a monthly basis. Every month, the meter reader goes to each and every home to provide manually generated bills after reading the energy meter. Then the consumer has to pay the amount to the power corporation. This is the current manual system.

Our project aims to replace this manual billing system by automatic online billing and power supply control system. This is achieved by interfacing a GSM (or the power line itself) and micro controller based control unit to the existing energy meter. The control unit will read the energy meter reading and send it to the server along with other identity and security details. The server will process all the information received from control unit and send back a control signal to the control unit based on online payment details charged to the consumer. Depending on whether the consumer has paid or not, the power supply to his house is either continued or shut down automatically by the control unit as per control signal received from the server. This project proposal reduces manpower utilization and improves the customer service. Online payment is also much easier for the consumer. This system also helps to analyze and study power line utilization to produce MIS reports which can be used for planning.

2BEEC-A15 – MODERN HOME SECURITY SYSTEM USING PIR & GSM

Mohammed Shinaz
Mohammed Suhaib
Hitesh Kumar J.S.

Mr. Prasanna Kumar.C (Guide)

Abstract:

The need for home security alarm system nowadays is in serious demands as no of crimes are increasing everyday there has to be something that keep us safe. We all aware of high security system. Present in market but we are there not easily available. We therefore intent to provide a solution by constructing a cost effective electronic system that has capability of sending the motion of intrudes and selling off the alarm the basic idea behind the project is that all bodies generate heat energy in the form of IR which is invisible to human eye but detected by PIR sensors.

SECTION 2 B

2BE-EC-B-02 - PLANT CLASSIFICATION USING RASPBERRY PI 3.

Sequeira Ronston Kevin
Priya Suryawamshi
Sauhan Husain
Swathi PK

Ms. P Vaidehi Nayantara (Guide)

ABSTRACT

Increasing world population and limited food resources, has made it inevitable to apply the benefits of modern technology to improve the efficiency of agricultural fields. Automatic plant type identification process is crucial not only to industries related to food production but also to environmentalists and related authorities. It increases productivity, contributes to a better understanding of the relationship between environmental factors and healthy crops. It is expected to reduce the labor costs for farmers and increase the operation speed and accuracy. In this project, we propose a method to classify the type of plants in a video sequence. Our

approach utilizes feature fusion together with color and texture features and support vector machine is used for classification. A variety of feature extraction techniques are employed in W-B, R-G and B-Y color spaces to extract color and textural features. Principal component analysis and t-distributed stochastic neighbor embedding methods are employed for dimension reduction. The project would be implemented on Raspberry Pi 3 using OpenCV.

2BE-EC-B-03 - SMART BAG

Vishwanath
Sanketh
Prathamesh
Ravishankar

Ms. P Vaidehi Nayantara (Guide)

ABSTRACT:

Here is the smart bag where there will be GPRS and is used to know the person is in which place... And the bag will have the circuit to detect the weight of the bag that can be withheld and is used also for the purposes. Of machinery works the bag contains internal storage of battery for some DC sources and some amount of AC.

2BE-EC-B-04 - DTMF BASED HOME OR OFFICE AUTOMATION WITH 6 DEVICE CONTROL

Sheetal Rao
Rashmi Pai
Swastika
Tejashwini J.

Ms. Nisha (Guide)

ABSTRACT

Despite of alternatives based around the Internet, SMS and e-mail, the good old DTMF remote switch still has its place, and, thanks to the use of a modern microcontroller, which is still simple and economical.

Today a telephone connection is available anywhere and at any time, with forms of communication other than speech having been available for some time. Alongside SMS and WAP there is the simpler established technology, known as 'Dual Tone Multi Frequency' or DTMF for short, which we use here in order to control a circuit decoding the frequencies generated by the instrument. Telephone service providers have used this in the dialing system in the analogue telephone network to replace pulse dialing, which exists from days of mechanical Dialers. Once a telephone connection is in place, a transmitted tone can be used in order to trigger a desired action. This technique is well known from its use in remotely accessing answering machines or conversing with service providers, here allows us to use the keypad to control six circuits once a call has been set up.

This Project is designed to control Household/Office electrical devices from anywhere in the world through any landline or a cell phone. The circuit consists of a DTMF tone decoder and a

powerful 8 bit Microcontroller AT89S52. The microcontroller controls all the system. In this project we can control six devices through relays which isolates the circuit from the appliances. The Microcontroller senses the BCD outputs through the DTMF decoder IC MT8870 and it switch on/off the corresponding devices according to the user need. The circuit has an inbuilt phone ring sensor circuit and the system will take over the phone control if it was not taken manually. Press the corresponding numbers to turn on/off the devices, for ex: press 1 to turn on/off device 1, press 0 to switch off all devices, press 9 to switch on all devices, press 8 to disconnect the telephone.

2BE-ECB-05 - REAL-TIME PANORAMA

Shetty Arpitha Shekar
Punyashree
Prathista Tejpal Puthran
Sarika
Priya K

Ms Nisha

Abstract

A Panorama is any wide angle view or representation of a physical space, whether in painting, drawing, photography, film, seismic images or a three-dimensional model. We know that a web cam is a video camera that feeds or streams its images in real time to or through a computer to computer network. Now in web cameras while using different cameras in different places there is a chance of taking place of blind spot. The solution to this is of making a panorama so that the issue of blind spot is resolved, and therefore image detection is easier and many social issues like robbery cases can be handled with ease. We will be making use of web cam and the raspberry pi camera module. We will construct the panorama and stitch images together. Constructing a panorama using multiple cameras and performing motion detection independently each stream ensures that there is no blind spot in the field of view.

2BE-ECB-06 - SMART HEART CARE:

Sharini D L
Sapna Prabhu G
Tejesh Kumar
Premchand M

Mrs. Reshma (Guide)

ABSTRACT

The human death due to heart attack is increasing day by day. Due to today's human life style, eating habits, irregular daily routines the heart attack problem is becoming predominant. The heart attack is more prone to elders means the people having age more than 60 - means mostly to senior citizens.

The device is made using smart sensor that converts heart beat into pulses. It uses micro controller wireless transmitter – receiver and a normal cell phone. The cell phone has one medical emergency number (or a number of concern person) stored in the speed dial number button. So when micro controller detects heart attack, it wirelessly sends signal to cell phone to call emergency number and it also contains. finally the aim of our project is to design and build

a portable blood pressure monitor device which can also sense heart attack using heart beat of a person.

2BE-ECB-07 - WATER LEVEL INDICATOR USING 555 TIMER

AUTOMATIC WATER PUMP CONTROLLER

Soumyashree Rao
Sharanya B Acharya
Prathiksha
Santhosh Kumar

Ms.Nisha (Guide)

ABSTRACT:

Here is the simple water level alarm circuit using 555 timer IC which will produce an audible sound when the water level reaches to its preset level. This circuit uses 3V DC power supply. Therefore this circuit is quite handy to use. This circuit of water level alarm is based on the astable multivibrator which is wired around IC1 (NE555). The operating frequency of this astable multivibrator depends upon the values of capacitor C1, resistors R1 and R2 and the resistance across probes at A and B. when there is no water up to the level of probes, because of open circuit astable multivibrator will not produce any oscillations hence the circuit will not produce sound. When the water reaches to the level of probes, the circuit will be completed and some current flows through the water. Thus astable multivibrator produces oscillations proportional to the values of C, R1, R2 and the resistance across the probes. Now the buzzer will beeps to indicate that the water is reached to its preset level.

2BE-ECB-08 - ELECTRI POWER GENERATION BY FOOTSTEPS USING PIEZOELECTRIC MATERIALS

Sajana NK
Ritika P Shetty
Sapna Gambhira
Saloni N

Mr. Sachin C.N. Shetty (Guide)

Abstract

In today's world, power generation is one of the major problems, the need of power has not come to an end. The concept of generating power using footsteps can be very useful in today's busy world especially in the countries where the population is large. The electricity can be obtained by the use of piezoelectric material. Walking or running is the most common activities that are done by the people all around the world. The energy that we spend driving these activities gets wasted in the form of vibrations on the ground. Instead, by the use of piezoelectric material the wasted energy can be converted into electricity by the principle of piezoelectric

material. This system can be installed in various work places or places where there is presence of ground.

2BE-ECB-09 – OBJECT TRACKING USING RASPBERRY PI AND OPENCV

Prajwal D. Kulal
Prathwin Shetty
Rakesh P.G.
S. Suraj

Mr. Praveen Konda (Guide)

Abstract

Autonomous vision based robots are intelligent robots which take visual data, process of and provide appropriate output. These robots are totally independent and don't need any kind of human interaction and since they are pref.... with instructor. A robot is designed on Raspberry PI using open CV, which is used for object detection based on its color, size and shape.

2BE-ECB-10 - HANDWRITING RECOGNITION WITH HOG

M. Sharath
Sourav
Pratheek
Rakshith.A

Mrs. Megha (Guide)

ABSTRACT

Automatic Handwritten Digits Recognition (HDR) is the process of interpreting handwritten digits by machines. There are several approaches for handwritten digits recognition. In this paper we have proposed an appearance feature-based approach which process data using Histogram of Oriented Gradients (HOG). HOG is a very efficient feature descriptor for handwritten digits which is stable on illumination variation because it is a gradient-based descriptor. Moreover, linear SVM has been employed as classifier which has better responses than polynomial, RBF and sigmoid kernels. We have analyzed our model on MNIST dataset and 97.25% accuracy rate has been achieved which is comparable with the state of the art.

2BE-ECB-11 - BOMB DETECTOR

Savitha
Prajyothi Talekar
Varsha
Swetha S.

MR.Praveenkumar Konda (Guide)

ABSTRACT:

Our team aims in production of a bomb detector, as our main aim is to safe guard our country. As most of the bomb detector use vapour detection technique. Plastic bombs goes undetected and we aim in detection of plastic bombs.

2BE-ECB-12 - OBSTACLE DETECTOR FOR VOICE CONTROLLED ROBOT

Sandya Damodar
Prithwi C Bhandary
Rehan
Ranjith K

Mr. Savidhan Shetty (Guide)

Abstract

The main moto of this project is to help the disabled. The Robot uses a Bluetooth module which is connected to the mobile phone, where the voice command is given and the command is received by the Bluetooth module sent to Arduino where the command sent to motor driver and the motor and the bot mover.

2BE-ECB-13 - LUGGAGE SECURITY ALARM PROJECT CIRCUIT

Soumya K
Shobhitha Y
Supritha
Mamatha

Mrs. Megha (Guide)

ABSTRACT:

During our journey through train and bus, we carry many important things and all the time we have fear that someone might lift our luggage. So to protect our baggage, we normally lock our baggage through old ways by the help of chain and lock. After all locks, we still remain in fear that someone may slash the chain and take away our valuable material. To overcome with these fear, here is an easy circuit which is based on the NAND gate. In this circuit, when someone tries to lift your luggage, it will generate a warning alarm which is very much helpful during your travel in the bus or train even at the night time as it can also produces audio visual indication attached to the relay. Another application of this circuit is that you can employ these into your house so to avoid the attempt of robbery in your house with the help of this alarm

circuit. When anyone tries to open the door of your house, loop break down and sound from the alarm produce.

2BE-ECB-14 - PLC BASED RAILWAY LEVEL CROSSING GATE CONTROL

Sharath Bhandari
Praveera
Sushma
Swarna

Dr. Ashwath Rao (Guide)

ABSTRACT

In the rapidly flourishing country like ours, accidents in the unmanned level crossings are increasing day by day No fruitful steps have been taken so far in these areas. our paper deals with automatic railway gate operation (i.e.,) automatic railway gate control at a level crossing replacing the gates operated by the gatekeepers, It deals with two things, Firstly it deals with the reduction of time for which the gate is being kept closed and secondly, to provide safety to the road users by reducing the accidents. By employing the automatic railway gate control at the level crossing the arrival of the train is detected by the sensors placed in the side of the tracks. Hence, the time for which it is closed is less compared to the manually operated gates. The operation is automatic so error due to manual operation is prevented. Automatic railway gate control is highly PLC based arrangements, designed for use in almost all the unmanned level crossing in the train.

2BE-ECB-15 - SMS CONTROLLED ROBOT

BLUETOOTH CONTROLLED ROBOT

Veekshitha.Shetty
Raksha.Chandrashekar
Rakshitha
Prashitha

Ms. Megha (Guide)

1)Main objective of this project is simpler way of handling the robot rather than complicated remote control system

2a)It provides economical solution for robot control system n it also can be used for sophisticated robot application.

2b)Software tools

*keil compiler

*orcad

*proload

Hardware tools

*microcontroller AT89S52

*motors n driver circuit

*MAX 232

*Gsm model

Robot is a system that contains sensors control system manipulators power supplies and software all together performing a task.It is combination of various fields of engineering clubbed together.In this project robot is controlled by a microcobtroller which is controlled sending a sms.The mechanical arrangement to the robot is given to robot by a robotic car .

2c)As projects are usefull for our future we are fully determined to work for it ..Whenever we are free or on our vactions we ll complete it with complete interest.

2d)Reference from books ,internet and lecturers advice.

2e)It doesnt have any bad impact on environment.

2f) Around 4000 to 5200

2g)Yes it can be

2h)we will continue it untill it is covered to a product.

2BE-ECB-16 – SIMPLE SOIL MOISTURE DETECTOR USING ARDUINO

Simrin Kotian

Shruthi

Shilpa K

Prajwali.T

Mrs. Megha N (Guide)

Abstract

This is a simple arduino project for a soil moisture sensor that will light up a LED at a certain moisture level. It uses arduino duemilanove microcontroller board. Two wires placed in the soil pot form a variable resistor, whose resistance value varies depending on the soil moisture. This variable resistor is connected in a voltage divider configuration and arduino collects on voltage proportional to the resistance between the two wires.

2BE-ECB-17 - BORDER ALERT SYSTEM FOR BOATS

U Harikrishnan

Vineet Kavlekar

Rashmith Rai

Siddharth Shetty

Rehan Sayed

ABSTRACT

In day-to- day life we hear about many tamil fishermen being caught and put under srilankan custody and even killed. The sea border between the countries is not easily identifiable, which is the main reason for this cross border cruelty. Here we have designed a system using embedded system which protects the fishermen by notifying the country border to them by using Global Positioning System (GPS) and Global system for mobile communication (GSM). We use GPS receiver to find the current location of the fishing boat or vessel. Using GPS, we can find the current latitude and longitude values and is sent to the microcontroller unit. Then the controller unit finds the current location by comparing the present latitude and longitudinal values with the predefined value. Then from the result of the comparison, this system aware the fishermen that

they are about to reach the nautical border. The area is divided into four zones- normal zone, warning zone, zone near to restricted zone and finally the restricted zone. If the boat is in normal area, then the LCD displays normal zone. Thus they can make it clear that the boat is in normal area. In case it moves further and reaches the warning zone , the LCD displays warning zone. If the fisherman ignores the warning or fail to see the display and move further, and if the boat enters the zone nearer to the restricted zone the alarm will turn on and the speed of the boat engine automatically gets controlled by 50%. If the fisherman did not take any reaction about the alarm and move further, then the boat will enter into the restricted zone, the alarm continues to beep as before, and once it touches the restricted zone, the boat engine gets off by the control of fuel supply to engine.

SECTION 3-A

3BE-EC-A-01 - REMOTE CONTROLLED SWITCHING DEVICE

Mayuri J.V.
Aswaithi A Ashok
Ayshathul Nisha
Mohammed Sinan
Nikitha G.

Mr. Sharathchandra N.R.

Abstract

A wireless remote control switch is an electric switch which is controlled by a radio or other signal and does not require an operator to touch the switch. The remote control device if electrically operated uses batteries with a low safe voltage. Such a switch avoids the risk of electric shock if a user touches a switch with wet hands and allows switching apparatus from a location without a wired switch. The aim of this project is to design a circuit such that one can control home or industrial appliances using the help of remote.

3BE-EC-A-02 - SYSTOLIC ARRAY ARCHITECTURES FOR SUNAR–KOÇ OPTIMAL NORMAL BASIS TYPE II MULTIPLIER

B.Priyanka
Aishwarya.L.Kammath
Lavanya
Mallika.D
Ananya.A.Shetty

Mr.Praveenkumar Konda (Guide)

ABSTRACT:-

We present linear and nonlinear techniques for design exploration of an iterative algorithm. The nonlinear techniques allow control of processor workload and control of communication between processors. The algorithm considered is the Sunar–Koç optimal normal basis type II multiplication algorithm. Six systolic arrays are obtained. General formulas are provided for each design so that the operation of the system can be determined for a given $GF(2^m)$. The proposed architectures have been implemented using 45-nm CMOS technology and compared with published architectures. The results show that the proposed designs have at least 44.4% lower total computation time compared with the designs of all bit serial multipliers, while having slightly larger area delay product (ADP), up to 19.1%, compared with some of the bit serial multipliers and having smaller ADP values compared with most of the digit serial ones. Moreover, they have at least 46% lower power delay product compared with all bit serial and digit serial multipliers.

3BE-EC-A-04 – HEALTH DETECTION SYSTEM

Kavya
Krithi
Krithi B Shetty
Krithi Shetty

Kiran Kumar V G (Guide)

ABSTRACT:

Our project is working model which incorporates sensors to measure the parameters like body temperature, heart beat, respiratory temperature and ECG, it is monitored by computer system so that the patients health conditions can be analyzed by the doctors which gives accurate results.

3BE-EC-A-05 - FISHERMEN SAFETY DEVICE USING BORDER ALERT SYSTEM

Eesha Poonja.A
Krathika K Amin
Maithri B
Manasa Shetty

Kiran Kumar V G (Guide)

ABSTRACT :

In day-to-day life we hear about many tamil fishermen being caught and put under srilankan custody and even killed. Here we will be designing a system using embedded system which protects the fishermen by notifying the country border to them by using Global system for mobile communication (GSM). At first we find the current location of the fishing boat or vessel. Then we find the current latitude and longitude values and is sent to the controller unit. Then the controller unit finds the current location by comparing the present latitude and longitudinal values with the predefined value. Then from the result of the comparison, this system aware the fishermen that they are about to reach the nautical border. The area is divided into four zones normal zone, warning zone, zone near to restricted zone and finally the restricted zone. If the boat is in normal area, then the LCD displays normal zone. Thus they can make it clear that the boat is in normal area. In case it moves further and reaches the warning zone, the LCD displays warning zone. If the fisherman ignores the warning or fail to see the display and move further, and if the boat enters the zone nearer to the restricted zone the alarm will turn on.

3BE-EC-A-06 - DESIGN AND ANALYSIS OF EFFICIENT PHASE LOCKED

Aisha Ruzna
AMIRA NADHA
Banjan Pooja Raghuv eer
Apoorva V.Ail

Mr.Ashwath Rao (Guide)

ABSTRACT:

Phase locked loops are commonly used to generate well-timed on-chip clocks in high-performance digital systems. Modern wireless communication systems employ phase locked loop (PLL) mainly for synchronization, clock synthesis. Because of the increase in the speed of the circuit operation, there is a need of a PLL circuit with faster locking ability. Many present communications operate in the GHz frequency range. Hence there is a necessity of a PLL which must operate in GHz range with less lock time. PLL is a mixed signal circuit as its architecture involves both digital and analog signal processing units. The present work focuses on the redesign of a PLL system using the 180nm process technology in CADENCE virtuoso analog design environment. Here a current starved ring oscillator has been considered for its superior performance in form of its low chip area, low power consumption and wide tuneable frequency range. The layout structure of the PLL is drawn in CADENCE virtuosoXL layout editor. Different types of simulations are carried out in the spectre simulator.

3BE-EC-A-07 - PESTICIDE DETECTION KIT

Jeevitha
Charithra

Farhana
Archana George

Ashwath Rao (Guide)

ABSTRACT:

The population of India is rising, resulting in higher demand for food as well as decrease in land for farming. Hence to fulfill the increasing demand, food is adulterated to get more quantity in short period of time. Moreover, pesticides in crops are using above the legal maximum residue limit by farmers to gain more profit in lesser time. Among the class of organophosphate pesticides, chlorpyrifos is widely used in vegetables. Chlorpyrifos has toxic effects on the human body particularly on brain and nervous system. In this project, design and development of sensors for pesticide residue detection using parameters like electrical conductivity, pH etc are proposed. The proposed sensor system is easy, rapid and time undemanding method. So, this electronic device can also be used to check impurities in any other liquid like water, milk etc.

3BE-EC-A-08 - POWER MANAGEMENT SYSTEM AND AUTOMATIC BILL GENERATION.

KB Hemaraj
Amin Rakshith Ganesh
Chethan Kumar
Keerthan Kulal

Dr. Jose Alex Mathew (Guide)

ABSTRACT

The main intension of the project is to develop an efficient technic in power supply system and power management system. Now a days quality measurement and reduction in work is the very common in all the sector.

Here comes a new innovation named power management system perhaps increases efficient usage of power supply and avoiding separate bill generator and also up to date information to user through cell phone there by improving the quality of power supply.

This system can be conveniently installed in the every home, office, industries etc.

3BE-EC-A-09 – INTELLIGENT AGRICULTURE SYSTEM

Basappa BN
Hamdan
Hanamant

Mr. Savideran Shetty (Guide)

Automizing the agricultural system is very useful for old people and normal persons who lives far away from the property automatic agricultural system can even save us money and help in water conservation. Here LCD and GSM receive the information about temperature, humidity, condition of soil and motor. The paper modernization of indian agricultural system using micro

controller using 8051 and GSM is focused on atomizing the irrigation S/m for social welfare of Indian agriculture S/m and also to provide perfect irrigation in particular area.

3BE-EC-A-10 - SMART AUTOMATION OF FERTILIZERS & WATER DISPENSER

Navneeth
Harshith Adyanthaya
Akshay L Shetty
Anuraj Chouta

Mr. Sharathchandra N R (Guide)

ABSTRACT

The major aim of this project is to measure the N (nitrogen), P (phosphorus) and K (potassium) contents of soil and according to result add the necessary element in the soil. The N, P, and K amounts in the sample are determined by comparing the solution to a color chart. This can describe the N, P, K amounts as high, medium, low, or none. There are two terms i.e. macronutrients (nutrients required in large amounts) and micronutrients (nutrients required in smaller quantities). Nitrogen, Phosphorus, Potassium are required in large quantity in soil. "NPK measurement in soil and automatic soil fertilizer dispensing" is going to check the amount of the three main fertilizers which are nitrogen, phosphorus and potassium in the soil and dispense the required deficient nutrient. The existing system has a NPK kit to test the soil but the dispensing of fertilizers need to be done manually. This problem will be rectified in the proposed system. This system will save labor time and get better results with minimum amount of fertilizers.

3BE-EC-A-11 - SMART DISEASE DETECTION USING RETINAL IMAGE PROCESSING

Ajay K S
Deekshith N Moily
Mahesh Krishna Devadiga
Jeevan

Prasanna Kumar.C (Guide)

ABSTRACT

Retinal image holds a great potential to improve the quality, access, and affordability in health care. For patients, it can reduce the need for travel and provide the access to a super-specialist. Telemedicine programmes have the capability to distribute quality eye care to virtually any location and address the lack of access to ophthalmic services. The detection of blood vessels is an important task in diagnosing the diseases of eye. The present study is aimed at developing an automated system for the extraction of normal and abnormal features in retinal images.

3BE-EC-A-12 – IOT BASED SMART CITY (GARBAGE MONITORING)

Manish Y Shetty
Asad Ali
Akarsh
Mohammed Ashiq Seel

Mrs. Roopashree (Guide)

ABSTRACT

The IOT is able to incorporate transparently to seamlessly a large number of different heterogeneous end system while providing open access to selected subsets of data for development of digital service. In this project we focus specifically to an urban IOT system that while still being a broad category is characterized by specific application domain. In this project we use IOT to manage garbage and water that help the city to develop in an efficient way. Urban IOTs in fact are designed to support the smart city vision.

3BE-EC-A-13 – SHADOW MIMIC BOT

Ajay K.S.
Mahesh Krishnan Devadiya
Deekshan N Moily
Jeevan

(Guide)

Abstract

Robotic arm are not only used in industries but also can be used in day to day life. Usually arm has to be programmed by a programmer, but not always programmes are available and need for different mode of programming is necessary. Hence we introduce shadow mimic bot which can remember the movement of its dummy model and reflect one same continuously.

3BE-EC-A-14 - AUTO SLOT PARKING

Bharath
Meghanashree R K
Melisha Dsilva
Don George

Mr. Sharathchandra N R (Guide)

Abstract:

The aim of this paper is to automate the car and the car parking as well.. It discusses a project which presents a miniature model of an automated car parking system that can regulate and manage the number of cars that can be parked in a given space at any given time based on the availability of parking spot. Automated parking is a method of parking and exiting cars using sensing devices. The entering to or leaving from the parking lot is commanded by an Android based application. The difference between our system and the other existing systems is that we aim to make our system as less human dependent as possible by automating the cars as well as the entire parking lot, on the other hand most existing systems require human personnel (or the car owner) to park the car themselves. To prove the effectiveness of the system proposed by us we have developed and presented a mathematical model which will be discussed in brief further in the paper.

SECTION 3B

3BE-EC-B-01 - WIRELESS HEALTH MONITORING SYSTEM IN HOSPITALS FOR PATIENTS

Soumya Sonkar
Shradha
Ushalakshmi A
Vaishali M
M Santhosh Kumar

Ms.Pavanalaxmi (Guide)

ABSTRACT

In this project, a wireless communication system is designed and developed for remote patient monitoring. The primary function of this system is to monitor the temperature of a patient's body, and display the same to the doctor through RF communication.

In hospitals, where patient's body temperature needs to be constantly monitored, is usually done by a doctor or other paramedical staff by constantly observing the temperature and maintaining a record of it. It is a very tedious method.

This project can be further enhanced by sensing and displaying other vital statistics of a patient like blood pressure, pulse rate etc. Another feature can be added where a warning signal is generated if the parameters cross the safe limit.

3BE-EC-B-02 – FORECT FIRE & SMOKE DETECTOR

Sushmitha P
Someshwar Deeksha Vivekanand
Soujanya B
Vinayak Rao S.K.

Akshatta D. (Guide)

Abstract

The fire disasters are very dangerous and need to be detected and subsided properly especially in forests. A prototype model is developed in this project which detects fire, smoke and subsides the effects of fire hazard. The model consists of a detection and monitoring system. A fire sensor detects the radiations of the flame and a gas sensor senses the presence of high levels of CO₂. A gas inflame monitoring unit consists of a buzzer which is designed to respond when there is fire or smoke accompanied by an LED.

3BE-EC-B-03 - HOME AUTOMATION SYSTEM

Prateeksha D Ullal
Raina Hejell Coelho
Stella G
Swaroop B M
Prekshith K P

Prasanna Kumar. C (Guide)

ABSTRACT:

This project involves the design and construction of an individual control home automation system using NODE MCU and an android user interface. Home automation is the automatic or semi-automatic control and monitoring of household appliances and residential house features like doors, gate and even the windows. This project is a demonetization of low to design and build a multipurpose remotely controlled system that can switch OFF and ON any electrical household appliances by dialing a phone already interface via WiFi and microcontroller that controls a relay for the automatic switching ON and OFF of the appliances.

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3BE-EC-B-04 - POTHOLE DETECTION AND REPORTING

Swarna Sagarika Bhat
Saniya Anne Thankachan
Nimisha P
Vaishali

Ms. Pavanalaxmi

ABSTRACT:

Potholes are one of the major reasons for accidents in India. Detection and reporting of Potholes manually is tiring and time consuming. A system which is implanted in vehicles and automatically reports it to the concerned authority as well as the driver would solve the problem.

3BE-EC-B-05 - SMART LIGHT SYSTEM FOR HOME

Nischith B N
Shreyas J Shete
Shreyas K
Madesha J

Mr. Prasanna Kumar.C (Guides)

ABSTRACT

In today world, with increasing population and increasing need the main problem faced is power loss or excess use of power when its production or resources required to produce it is very low. The use of CFL, sodium lamps halogen lamp increases the power consumption and emit more heat. To nullify these problems we have found an alternative so as to reduce the power consumption and which may also help us reduce Greenhouse effect by using LEDs and RAMAN effect. Here the LEDs reduce the power consumption and the presence of distilled water naturally reduces the Greenhouse effect.

3BE-EC-B-06 – ULTRASONIC RADAR

Varun K. Bangera
Pranamy H.N
Shraddha Kamaraj Asnotikar
Spoorthi B.K.

Jose Alex Mathew (Guide)

Abstract

Radar is an object detection system that uses radio wave to determine range angle on velocity of objects. Ultrasonic sensors work on the principle similar to radar. It evaluates attributes of a target. By interpreting the echoes from the radio on sound waves respectively. Radar is an object detection system which uses radio waves to determine the range altitude, direction or speed of objects, the radar dish or antenna transmits pulse of radio waves or microwave which bounce off any object in their path. Arduino is a simple board microcontroller to make using electronic in multidisciplinary projects more accessible. This project aims at making a Radar that is efficient, cheaper and reflects all the possible techniques that a radar consist of

3BE-EC-B-07 - INTELLIGENCE DIAGOSIS SYSTEM

Pooja M Benakatti
Racheal R Coelho
Ravali G
Varun B Shetty

Dr.Jose Alex Mathew (Guide)

ABSTRACT

The abnormalities of slice MRI images are extracted using suitable techniques. These abnormalities are used to reconstruct volumetric (3D) structure of the abnormality using 3D reconstruction technique so that shape, size even texture of the abnormality can be obtained. This will help the medical practitioner to understand and identify the abnormality and it will help proper diagnosis.

3BE-EC-B-08 - ARDUINO BASED IRRIGATION SYSTEM

Savitha A R
Rini
Shrivathsa R Hebbar
Pratham P Shet

Ms. Pavanalaxmi (Guide)

Abstract

In the field of the agriculture, use of proper method of irrigation is necessary. In this project we use solar energy which is used to operate the irrigation pump. The circuit comprises of sensor parts built in using op-amp IC op-amps are configured here as comparators. A arduino board is used to control the whole system by monitoring the sensors and when the sensors sense the dry condition of the soil, then the arduino will send command to relay driver IC the contacts of which are used to switch on the motor and switch off the motor when the soil is wet.

3BE-EC-B-09 - POWER SAVER FOR INDUSTRIES AND COMMERCIAL ESTABLISHMENTS

Pujary Sachin Yogish
Shashidhar
Shravan S
Sanganna

Ms. Pavanalaxmi (Guide)

Abstract:

The project is designed to reduce the power loss in industries by power factor compensation through a number of shunt capacitors. This results in reduction in amount of electrical bill for industries and commercial establishments. Power factor is defined as the ratio of real power to apparent power. Having low power factor, the industry needs more energy to meet its demand, so the efficiency decreases. In this proposed system the time lag between the zero voltage pulse and zero current pulse duly generated by suitable operational amplifier circuits in comparator mode are fed to two interrupt pins of the microcontroller. The program takes over to actuate appropriate number of relays at its output to bring shunt capacitors into the load circuit to get zero power loss. The 8 bit microcontroller used in the project belongs to 8051 family.

Further the project can be enhanced by using thyristor control switches instead of relay control to avoid contact pitting often encountered by switching of capacitors due to high inrush current.

3BE-EC-B-10 - INTEL NUC IMPLEMENTATION OF INFANT DETECTION IN AN UNATTENDED REAL-TIME ENVIRONMENT

Swathi
Prajna U
Pooja R
Pratheeka P

Mr. Steven Lawrence Fernandes (Guide)

ABSTRACT:

Baby detection and monitoring system using real time frames from camera is proposed in this paper. Broadly, the process of system is divided into two major phases: training and testing. In training phase, a SVM model is trained to classify the facial images as baby or adult. Five geometric features are extracted using the location of eyes, nose and mouths in the face detected. In testing phase, if a captured facial image is classified as baby, the face is stored and after a pause of two minutes another facial image is captured and compared with the first one. Absolute difference measure and a threshold value of ten are used to check if both facial images are same or not. The proposed system was trained and tested on 80 images of both adults and babies to classify a face as adult or baby. For training, 56 images were used and system achieved 96.4% of correct classification rate. For testing, 24 images were used and system was able to achieve 95.8% of correct classification rate. The proposed system was also tested at real time to monitor the baby and it achieved an accuracy of 80%.

3BE-EC-B-11 - HOME EMAIL ALERT SYSTEM

Rajeshwari Rao H
Shrivathsa Bhat H
Shreya S Kunder
Vikhyath U Alva

Shikha (Guide)

Abstract

Home alert email system is used for recognizing guest or intruder who triggers calling bell or switch placed under door mat where trigger switch will be placed in your house through a rear time photo capture. Photo is captured by the camera placed on the door or any possible places the person can be recognized. This system is programmed by graphical programming environment labview. Then the capture image is saved in the memory. Also this system includes notifying the owner by immediately sending the saved image via email.

3BE-EC-B-12 - ARDUINO CONTROLLED CAR USING BLUETOOTH

**Rajath Kumar Kodoth
Nischith Shetty H
Thilak Raj
Sohan U Hegde**

Mr. Kiran Kumar (Guide)

Abstract

Arduino controlled car using Bluetooth can be remotely controlled with a distance of 10m from an Android smartphone using arduino app. The main application of the project is for security surveillance for military service. In this era of advance technology, it is difficult for human to interact into warzone. It can be used to detect mines in warzone where it is impossible for human to reach. There are three ultrasonic sensors to detect the object approaching the device. An indicator is connected to the stepper motor in order to indicate the position of the object. LCD display is connected to arduino and the sensors in order to measure the distance from the object.

3BE-EC-B-13 –SOIL FERTILITY ANALYSER

**Megha P.R.
Nikhil Kumar
Prakhyath Shetty
Rohan B.
Sankalpa Itagi**

Shikha Rai (Guide)

Abstract

The maintenance of soil fertility is important for substance land use. The fundamental idea behind this method that the amount of nutrients soil absorbs by the plant reflects the available amount of this salts in the soil. Whereas carrier trials along this line deals with storage of salts in major plants. Spatial patterns of soil properties and nutrient concentration need to be characterized to develop site specific farming practices that match agricultural inputs with regional crop needs.

IS

SECTION 2A

2BE-IS-A-01 - VIRTUAL INTERFACE FOR TRIAL ROOMS

Chaithany.G.Acharya
Pavithra
Mohammad Sohail Kasim Sayed
Gulfam

Mr.Janardhana.D.R

ABSTRACT:

Recent trends of youngsters like to have things done in a fast and easier manner. We introduce a virtual dressing interface using the Microsoft Kinect sensor. We extract the user posture data from the video stream by using depth and user label data provided by the Kinect sensor, register the cloth model with the Kinect skeletal tracking data, and detect skin to adjust the order of layers.

BE-IS-2A-06 – BLUR AND ILLUMINATION FACE RECOGNITION

Avaneesh
Alphonso Lincy
Anaya Shetty

Mrs. Suchetha G (Guide)

ABSTRACT

Based on the set-theoretic characterization, we propose a blur robust algorithm whose main step involves solving simple cognitive optimization problem. We do not assume any parametric form for the blur kernel however if the information is available it can be easily incorporated into the algorithm.

BE-IS-2A-07 -SECURE FILE ENCRYPTION AND DECRYPTION USING C

Mohammed Sharique
Ramnath Pai
Prakyath J
Prajwal Shetty

Mr. Rithesh Pakkala P. (Guide)

ABSTRACT

The objective of this project is to secure the content of file using encryption scheme. First user has to create a file to transfer. The content of the created file is encrypted for the security

purpose. After encryption, secured file is transferred. In order to view the original content of the file, user has to enter the proper password. If the password is correct, then the original file content can be viewed using decryption scheme. Otherwise, encrypted content is viewed.

BE-IS-2A-08 – CLOUD STORAGE SYSTEM

Cheryl Ann D'Souza
Jasin Sushmita Pal
Poorvi S.
Likitha Naveen

Ms. Akhila **(Guide)**

ABSTRACT

Cloud storage is a service model in which data is maintained, managed, backed up, remotely and made available to users over a network (typically the internet).

BE-IS-2A-09 – MUSIC PLAYER WITH BLUETOOTH CONNECTIVITY, POWER BANK, FM RADIO, TORCH, USB PORT

Aykya Rajan Shetty
Ashwin C.
K.N. Vinod Raj
Gautham G. Rao
Alphonsa Lincy

Ms. Shruthi Ramdas (Guide)

ABSTRACT

It is multi-tasking device which can be used as music player and power bank and the charge using both solar energy and electric power. We can play music using Bluetooth connectivity. It has an emergency LED light. It consists of components which performs all these tasks. We used USB Booster module for power output. When Schottky diode is forward biased micro USB charging port will be inactive and the battery is charged through solar panel. When Schottky diode is reverse biased micro USB charging port will be active and battery is charged through micro USB charger. This is a quite simple product which supports multi-tasks to be performed.

BE-IS-2A-10 – BLUR DETECTION WITH OPEN CV USING RASPBERRY Pi3

Pavithra J.P.
Ashmitha M.
Meghana
Fathimath Beevi
Yashraj R Shetty

Ramya B.S. (Guide)

ABSTRACT

The goal of the project is to find the amount of blur in an image. This project will show how to compute the amount of blur in an image using open CV python and the laplacian operator. We are applying the variance of laplacian method. By taking a single channel of an image and consoles it with laplacian 3 x 3 kernel and give the variance of response. If the variance falls below predefined threshold then the image considered blurry, otherwise the image is not blurry. This works due to definition of laplacian operator which is used to measure second derivative of an image. The laplacian highlights region of an image. If there is low variance then there is a tiny spread of response indicating there are very little edges in the image.

BE-IS-2A-11 – POWER GENERATING SHOES

Chirag Suvarna
Manjunath Kamath
Varun Shenoy
Mohammed Sharjee
Santosh Rai

Ms. Bhavatarini (Guide)

ABSTRACT

The goal of the project is to producing electricity using piezo elements. The main concept behind our project is to get electricity by walking. In this project we convert mechanical energy into electrical energy. Here we do not use non renewable resource, it is purely based on man power. We can get our work done as well as our cellphone charged.

BE-IS-2A-12 – DETERMINING SHAPE AND COLOUR OF IMAGE USING OPEN CV AND PYTHON

Anusha B. Bhogavi
Ankitha C. Kothwal
Meghna N.
Nishmitha R. Rao

Ms. Deepti Rai (Guide)

ABSTRACT

Our project is to determine the shape and colour of image using open CV and python. We used Raspberry Pi to introduce artificial intelligent . The approach is shape based and works towards the recognition. It is very useful in field of education, industry and medical science. To make the system complete fully account is given of the necessary image processing techniques that are applied to the images to make recognition possible. Techniques include the extract the shape from images and the creation of descriptions. The objective of this work has been to create a new system for artificial object recognition that forms a good basis for further development.

BE-IS-2A-13 – GENERATION FOR PASS PHRASE DICEIT

Bhavana B Shetty
Anushree B.S.
Likitha Shetty
Kavya K

Praahas Amin (Guide)

ABSTRACT

Currently security is a crucial issue for any person in this digital world. Hacking is the main problem faced by people today. Since passwords are easy to crack hence a whole phrase or sentence, a “passphrase” offers more security. A passphrase is a sequence of words or other texts used to control access to the computer system.

Even most Random Pass Phrase we choose may not be Random enough. This is where DICEIT comes in. This is easy to use app that can be used to generate strong random pass phrases with the touch of a button. The app provides a single button to generate random pass phrases and provide an option to copy the pass phrase to clip board user has the freedom to set the number of words to be used in the pass phrase. The more the number of words the stronger is the pass phrase.

BE-IS-2A-15 – ANDROID BASED PC CONTROLLER USING Wi-Fi

Aishwary P Shetty
Navyashree
P. Megha
Aysha Mohnifa
Kishore P.V.

Madhura (Guide)

ABSTRACT

An Android based PC controller using Wi-Fi is an android application that works like PC mouse. This application smartly controls PC keyboard function and mouse operations through an android mobile phone. This android application is based on the concept of using an android phone as a mouse. The software application once installed on an android can allow user to play games or control other PC functioning through the android phone. Thus a user can remotely access the computer instead of sitting beside it. This application overcomes the illumination of a mouse and keyboard.

BE-IS-2A-16 – CGPA MONITOR

Meghana P.
Fouziya Afreen
Pooja Krishna Patil
Aiham Akram
Srinidhi (Guide)

ABSTRACT

In this project, we considering marks of each subject and calculating CGPA of the marks. Then the CGPA will also be converted into the percentage and it will also monitor the students to get

required CGPA to a given company. If the CGPA is equal or greater to the CGPA what the company wants it says you will get the core company if it is ten then it says how much CGPA the student has to increase to get that core company.

SECTION 2B

2BE-IS-B-15 - RELISH APP

Vidya Vittal Shetty
Swathi
Shravya U Shetty
Sushma M B

Sweekriti Shetty (Guide)

ABSTRACT

This application will help all the people who always crib or grumble what to make tomorrow for morning breakfast or what to make if uninvited guests comes in, and especially when you are out of your grocery stocks at home. It will act as a saviour by helping such perplexed people to prepare some relishing items from the existing ingredients in the kitchen shelves. Ideally it solves the purpose of last minute preparation with the left over ingredients.

2BE-IS-B-02 - REALTIME HUMAN BEING MOOD DETECTION IN AN UNCONTROLLED ENVIRONMENT

Laya Nhandammadan
Kavya
Dhanushree
Kavya Bangari Jog

Naitik S T (Guide)

ABSTRACT

In this project, we demonstrate a real time system for human mood detection, tracking, and verification in such challenging environments. Human mood detection encompasses a range of technologies for detecting the presence of a human body in an area of space, typically without the intentional participation of the detected person and then detecting their various moods like anxiety, depression, etc .The first step of the detection process is to detect an object which is in motion. Object detection could be performed using background subtraction, optical flow and spatial-temporal filtering techniques. Once detected, a moving object could be classified as a human being using shape-based, texture-based or motion-based features. In this we use a web cam which is connected to raspberry pi 3 and open computer vision libraries are used to detect humans in uncontrolled environment. The components needed are raspberry pi 3, 16GB SD card ,keyboard ,mouse ,HDMI to VGA connector and monitor.

2BE-IS-B-03 - AUTOMATIC SEATING ARRANGEMENT TOOL FOR EXAMINATIONS

Saurav Kumar
Shrinandan A.N
Souhard T Shetty
Sharique Ahmed

Mrs. Akhila Thejaswi R (Guide)

ABSTRACT

The task of manually seating students in an examination hall is simplified in this project. The tool provides an effective measure to dynamically place students in an examination hall just by providing the number of rooms available. The main agenda is to describe the working of the software and how it is used to lessen the task of manually allocating seats during an examination. It makes the efficient use of classrooms.

2BE-IS-B-08 -SMART APP FOR DISEASE PREDICTION

Shreya K
Shravya Rai
Sameeksha S
Yashna Y Salian

Naitik S T (Guide)

ABSTRACT

It might have happened so many times that you or someone need doctors help immediately, but they are not available due to some reason. The Health Prediction application is an end user support and online consultation project. Here we propose an android application that allows users to get instant guidance on their health issues through an intelligent health care application online. The applications fed with various symptoms to check for various illness that could be associated with it and also provides information of the availability and location of the nearest doctor. Here we use some intelligent data mining techniques to guess the most accurate illness that could be associated with patient's symptoms .If the application is not able to provide suitable results, it urges users to go for blood test, x-ray, C.T scan or whichever report it feels user's symptoms are associated with ,so next time user may be able to login and upload An image of those reports. The application also has a doctor login, where the uploaded images are sent to respective doctor along with patient contact details. It also fixes appointment with the concerned doctor. The doctors may now contact the patient for further process.

2BE-IS-B-07 - ACCIDENT DETECTION AND VEHICLE TRACKING

ACCIDENT DETECTION AND QUESTION GENERATION APPLICATION

Thanusha Shetty
Primal Lobo
Yashaswi KS
Rakshith S

Madhura N Hegde (Guide)

ABSTRACT

The Rapid growth of technology and infrastructure has made our lives easier. The advent of technology has also increased the traffic hazards and the road accidents take place frequently which causes huge loss of life and property because of the poor emergency facilities. Our project will provide an optimum solution to this drawback.

An accelerometer can be used in a car alarm with alarm application so that dangerous driving can be detected. It can be used as a crash or rollover detector of the vehicle during and after a crash. With signals from an accelerometer, a severe accident can be recognized. According to this project when a vehicle meets with an accident immediately Vibration sensor will detect the signal or if a car rolls over, and Micro electro mechanical system (MEMS) sensor will detect the signal and sends it to ARM controller. Microcontroller sends the alert message through the GSM MODEM including the location to the hospital or a rescue team.

After the accident is occurred an audio note asking the driver "Are you ok" for 30 seconds is played if the driver is ok then he will press the buzzer within 30 seconds . If not then, the hospital can immediately trace the location through the GPS MODEM, after receiving the information (Google map).

Our project would save the life of people who are in danger and in need of help, as accidents are the major social problem due to many reasons in our day to day life , we want to take a step forward to try our best to solve this problem.

To minimize the death and severe conditions due to accidents the GPS and GSM technologies are used where immediate actions would be taken place by the ambulance service which might reduce the severity.

2BE-IS-B-06 -12V DC TO 220V AC CONVERTER

Sabitha Mary D'souza
Priyanka
Sonia
Ranjitha H K

Mr. Janardhana D.R (Guide)

ABSTRACT :

The basic idea behind every inverter circuit is to produce oscillations using the given DC and apply these oscillations across the primary of the transformer by amplifying the current. This primary voltage is then stepped up to a higher voltage depending upon the number of turns in primary and secondary coils. A 12V DC to 220 V AC converter can also be designed using simple transistors. It can be used to power lamps up to 35W but can be made to drive more powerful loads by adding more MOSFETS.

2BE-IS-B-07 – SAHYADRI EVENT MANAGEMENT

Sagarika.Rai.K
Shailesh Varun
Sakshi.Shetty
Sushma.Sukhesh

Rathishchandra R Gatti (Guide)

ABSTRACT

A perfect event management software for your enterprise to organize and execute the events of Sahyadri flawlessly.

Ideal solution to plan events of Sahyadri, manage the registrations and payments in an easy to use interface. Servers as a central place wherein your patrons can look for various events and register. Generate a report of event income across all of your events. It saves time and money on manual report generation process. This software reduces your printing and mailing costs on invitations and registrations for an event by providing a central place on the web keeps your audience informed of all the events and event related information. It provides key members of your organization with instant access to critical event management statistics for faster and better decision making. This software also saves time and money on manual report generation processes as you automate the collection and delivery of financial reports.

2BE-IS-B-08 – Burglar Alarm using Arduino and PIR sensors with SMS Alarm using GSM module.

Smitha B
Shruti Sanjay Lokeshwar
Snehal L Badiger
Sharan Shetty

Suchetha G (Guide)

ABSTRACT

A **Burglar Alarm** – is basically an intruder alarm or an anti theft alarm. So this project is all about building an anti theft alarm or an intruder alarm using Arduino and PIR sensor. It is possible to enhance this project with many features like adding a GSM module to send SMS alerts to specified mobile numbers when an intruder is detected (when a motion is detected inside the range of PIR sensor). Buzzer – is used to create a sound alarm when ever a movement is identified inside the range of PIR sensor. Switch – a push button switch is used to reset the burglar alarm once its activated.

2BE-IS-B-09 - WEBLIB

Swapna
Supritha Bhandary
Ramya
Prathwini

Dr.Rathishchandra R Gatti (Guide)

ABSTRACT

Our project deals with database of library. It is a library website which includes link of collection of books with author name, registration of students which includes login link and registration link. Link of date issue of the books and returning the books. Our project is software based. It deals with processing HTML, handling text encodings, preparing data for HTTP requests and operations with files and directories .In this project anyone can view library information about types of books ,date of issues and returning of books. Our project can even be continued in higher semesters.

2BE-IS-B-10 – CG PROJECT (EKALAVYA)

Vijith J Shekha P
Sreeprada
Tanuvi
Yashaswi K Shetty

Mrs. Ramya B S (Guide)

This project is based on Computer Graphics, in order to teach students Ekalavya's story and inspire them. Also it makes students to understand his story clearly. Ekalavya is the character from Epic Mahabharatha and he studied archery from self-study. He was one of the powerful archer and warrior.

2BE-IS-B-11 – ENCRYPTION AND DECRYPTION OF DATA USING RSA IN JAVA

Varsha Shetty
Srujan S. Shetty
Ujwal
Subrao S.

Ms. Deepti Rai (Guide)

ABSTRACT

In this project we enter a character and the character is converted into its ASCII value. The two prime numbers are selected such that they are not equal. Then the data will be encrypted which is kept public. The decryption key is kept secret. RSA is the first practical public key cryptosystems are needed for security services and most commonly achieved for confidentiality. This consists of three algorithms: i) enter the data ii) encryption iii) decryption RSA stands for Rivest, Shamir, Adelman, these are the inventors of this technique.

2BE-IS-B-12 – CRAZY ALARM CLOCK

Sharavan P.
Sonali S
Vandana

Rithesh Pakkala (Guide)

ABSTRACT

It is an android application. It is a clock that is designed to alert an individual or a group of individuals at a specified time. The primary function of this clock is to awaken people from their night's sleep or short naps. So this alarm is an aid in developing a normal sleep pattern and maintaining a regular schedule.

2BE-IS-B-13 - SINGLE CELL BATTERY CHECKER

Rakshith Karumbaiah
Pranamy A Y
Shruthi Shetty
Swathi

Mr. Praahas Amin (Guide)

ABSTRACT

Although the popularity and use of cell batteries has declined, most people still have a few devices around the house that use AA, AAA, C, or D cell Batteries, such as remote controls, clocks, or children's toys. These batteries carry much less than 5 V, so we can measure a cell's voltage with our Arduino to determine the state of the cell. In this project we'll create a battery tester.

2BE-IS-B-17 - LOGIC CALCULATOR

Shreya.S
Shreya.N.Kottari
Prathika.P.S

Jayapadmini Kanchan (Guide)

ABSTRACT:

Most of the students get confused with the truth tables of logic gates . In order to get rid of this confusion we have developed this application called LOGIC CALCULATOR . This LOGIC CALCULATOR includes truth tables of basic gates such as AND , OR , NOT and universal gates such as NAND and NOR . It also includes XOR ,XNOR ,adders and sub-tractors. This application gives output for all possible combinations of inputs. We hope that this application will be useful to the students and it will help the students to prevent further confusion regarding the logic gates.

SECTION 3A

3BE-IS-A-01 – CODE QUEST

Deeksha MS
Mithya MU
Maithreyee.C

Mr.Naitik S.T (Guide)

Abstract:

CodeQuest provides unparalleled, expert instruction to overcome coding challenges practices face daily. Teams will be accepted on a first come, first served basis. Candidates may register a second team, but second team will be on waiting list until registration is opened. Problem statement which contains the description of the problem, format of input and output and the constraints on input each in a separate section is given to the young minds to test their knowledge and coding skills.

3BE-IS-A-02 - FIRE AND GAS ACCIDENT AVOIDER SYSTEM

FIRE DETECTOR ALARM SYSTEM

Ashoora
Deepika R
Akshatha K
Ashitha A.P

MR. JANARDHANA D R (Guide)

ABSTRACT:

System smartly avoids fire as well as gas accidents by detecting fire and gas leakage and taking measures to avoid any accidents from happening. The system consists of fire and gas sensors for detection purpose.

If system detects a gas leakage the system first shuts off the gas supply to avoid more gas leakage. The system now also starts an exhaust fan to suck out the leaked gas. Also the system sends information of the event to the authorized user through an sms message using GSM modem. Now the system also has a fire sensor to detect fires. As soon as fire is detected the system shuts off gas supply thus preventing the fire from spreading further and avoiding any chances of explosions. Now the system starts the exhaust fan in order to suck out all the smoke. Also it sends information of this event to authorized user, so user can take necessary action urgently.

BE-IS-3A-03 – CUSTOMER ERA

Medhini G
Harshita V
Jeevithashree P
Lavanya M

Mrs. Bhavatharini (Guide)

ABSTRACT:

This website is mainly developed to help the customers. In this website we can mainly observe four parts i.e. rating the products, comparing the cost of the same product in different websites, posting the images of the new product with captions and feedback of the user to the website which helps us to improve the website.

3BE-IS-A-04 – APP FOR PLACEMENT

Deekshik Bharadwaj
Guatami K. Mahak
Manjushree A.n.
Nareen Kamanakeri

Ms. Jayapadmini Kanchan (Guide)

ABSTRACT:

After the success of our website placement guide.com. We are now developing an App for the same. This App provides both technical and non-technical skills. Earlier we had stressed more on the importance of non-technical skills. This time we are focusing more on the tricks how to face an interview. Our extensive range of services includes:

- 1) Preparation for the interview
- 2) Things you must know before attending an interview
- 3) Group discussion
- 4) Tips for the first job**

3BE-IS-A-05 – E-COMMERCE WEBSITE – THE BABEOUTLET.COM

Aditya M. Naik
Mohammed Shiran
Nikhith V Naik
Nilesh Kumar

Mr.Prahaas Amin (Guide)

ABSTRACT:

Fed up tiring walks around the mall worry not Babeoutlet provides online shopping service with new collections every month with lowest possible marginal values. We also provide the feature of returning the products purchased with full cash back option.

BE-IS-3A-06 – SMART STREET LIGHT FOR SAHYADRI CAMPUS

Ashreen
Anusha Bangera
Jyothi Mishel Viegas
Gladys Merlyn D'Souza

Dr. A.P. Manu (Guide)

ABSTRACT:

The world is full of different kind of light sources some are natural ones so while others are man made light sources. The man made light sources are only two modes of operation i.e. Switch on and Switch off. Thus it leads to wastage of energy. In our project we have implemented an advanced light control system which is capable of replacing the old generation light control system. The system is implemented on an embedded platform and is equipped with a photo sensitive detector [LDR] which gives the required input for operation. Application of such a system can be implemented in the work stations, park lights, street lights, headlights etc.

3BE-IS-A-07 – THE BLINDMAN'S STICK

Mohammed Mohiddin
Jnanesh Shetty
Ahana Rai

Sweekrithi Shetty (Guide)

ABSTRACT:

There are lot of people who are unable to see or unable to detect any obstacle. This may sometime lead to an (major or minor)accidents. By using our product one can be detect which can prevent him/her from accident. We do it by placing a sensor on the stick which detects obstacle. As soon as it finds one it can produce a vibration or a beep so that the user is aware of obstacle coming up.

3BE-IS-A-08 – GOPC SOFT – TECHNOLOGY WEBSITE

Manjesh P Shetty
Abhishek U. Bangera
Akshith
Gautham L Alva

Mrs. Ramya B S (Guide)

ABSTRACT:

GOPCSOFT is a technology website which provides all the latest updates about cyber security, Ed-Tech Resources, Tech news, Tech reviews and also step-by-step tutorials.

3BE-IS-A-09 – VTUMANIA.ESY.ES

Dechamma M.B.
Disha S. Rai
Anuitha P

Mr.Vasudeva rao (Guide)

ABSTRACT:

It contains all the VTU resources like text books, previous year question papers VTU notes. It contains the latest project ideas and demo related to IT technology. It provides latest updates about VTU results, syllabus and much more. All these resources are available in a single page. The main feature of this project is VTU results in one click.

3BE-IS-A-10 – E BUS PASS GENERATION SYSTEM

Deeksha K Rai
Namratha
Jagruthi Shetty
Ananya Alva

Mr.Rithesh Pakkala P (Guide)

ABSTRACT:

E-Bus pass system is a real time project which is useful for the students who are facing problems with the current manual work of bus pass registration and renewal. It also increases the validity period, warns to the students before completion of his validity period by sending sms or email. Bus pass renewal or registration can be done using a voucher or even by credit card. This online bus pass registration application will help students save their time and renewal bus pass without standing in line for hours near counters. Initially students used to register with the application by submitting details of photo address proof and required details and submit online. They will verify the details and if satisfied the will approve.

3BE-IS-A-11 – MENU’S AND SUBMENU’S

Akshaya

Anuya Kumary

Kripa Shetty

Nikitha Shetty

Mr.Prakhyat Rai (Guide)

ABSTRACT:

The project is built using the aid of computer graphics. The project uses the concept of menu’s and submenu’s. This project has been implemented in Microsoft Visual Studio professional edition 2008 and 2013 which uses C and C++ as a language tool. We mainly used “openGL” for the project. We used <QL/glut.h> a library function. OpenGL provides various viewing function that help us to develop various views of single object and the way in which it appears on screen.

3BE-IS-A-12 – PU GUIDE

Anusha Shetty

Khusboo Vaidya

Kajal B. Surve

Mrs.Madhura Hegde (Guide)

ABSTRACT:

Pre university is an important part of education in a student’s life because it defines his profession and future. Hence preparing well for exams take a major role. Before writing the exam, one must know how to tackle with the tricky questions and answer smartly. The PU guide is designed to help the students to learn trick and tactics to face the exam.

3BE-IS-A-13 – INSTITUTE MANAGEMENT SYSTEM

Chaithra Aithal
Chandrika
Deepandharshini M.
Dhanyashree

Mrs.Suchetha G. (Guide)

ABSTRACT:

The project titled "Institute Management System" is designed using active server pages. NeT with Microsoft Visual Studio net 2005 as front end and Mircrosoft SQL servers 2000 as back end which works in NET framework version 2.0. The aim of the project is to manage the database for a particular institution.The database contains the information of the organization which helps to get to know the complete details of any institution in which ever they are interested.

3BE-IS-A-14 – HEALTH AID

Aysha
Juvena Ponamma C
Katheejath Saniyya
Nameeza H.K.

Mrs. Deepthi Rai (Guide)

ABSTRACT:

An accident is an unexpected and unplanned situation that happens and affects human in a negative outcome. The accident can cause an injury to a human biological organism. Thus, the provision of initial care for an illness or injury is very important move to prepare the patients or victims before sending to the doctor. The health aid website is developed to give some directions for preliminary taking care of patients via mobile device.

SECTION 3B

3BE-IS-B-01 - PLAYER VS CPU COMBAT FOR MULTIPLATFORM

Ravi yadav
Rahin shama
Sharanya K.R
Thashreefa

Mr. Prahaas Amin (Guide)

Building a player vs cpu combat using unity. Here the user gets to face difficult level as he proceeds which uses the users intelligence and his thinking to beat the fast better and stronger opponent. The outcome of the project would be a fully fledged game where the user gets to exploit his thinking and advancing techniques to face the new levels and a better opponent each time he plays.

3BE-IS-B-02 - FEEDBACK REVIEW SYSTEM FOR E-COMMERCE WEBSITE

Prajna S Bhandary
Sunyna Shetty
Raiton Lobo
Vamshi G Shetty

Mr. Janardhana D.R (Guide)

ABSTRACT:

Checking the rating of the products or services is necessary while determining the purchase of the product or making use of services. This web application accepts the rating of users/ customers who had already purchased the particular product and updates to the website along with their respective feedbacks. This helps the customers to determine whether or not to buy a particular product.

3BE-IS-B-03 – SEA VIEW

Roopa Madhukar Desai
Shifali Shetty
Tripti P.S.
Vinutha

Mrs. Madhura Hegde (Guide)

ABSTRACT:

The development in the field of computer graphics is rapid. It has shown a very speer growth in a very less time. Right from animations movies computer games and many more areas is being used intensively. It works with real time entities objects in the real world environment. Computer graphics is concerned with all aspects of producing pictures or images using a computer. The field began humbly almost 50 years ago with the display of a few lines on the cathode ray tube. Open GL has become a widely accepted standard for developing graphics application. The application both by the needs of the user community and by advance in h/d and s/w.

3BE-IS-B-04 - IMPLEMENTATION OF SIC/XE ASSEMBLER USING C.

Swathi
Ushakiran S
Vishmitha
Yakshitha H

Mrs.Suchetha G (Guide)

ABSTRACT:

The project is aimed to develop a C programming language to assembly language compiler for the hypothetical SIC/XE computer. The compiler contains an assembler that uses the generated assembly code to create executable object files. Lexical and syntactic rules of the C programming language are used to analyze the source code of the input program.

3BE-IS-B-05 - GUIDANCE GURU

Saajan V Ajila
Sanjeetha K Shetty
Suhani M
Shilpa H

Dr A P Manu (Guide)

Objective: To serve the purpose of career guidance to the general public and to establish a portal for University-student interaction.

3BE-IS-B-06 - SPSS FACTORY

Shruthi P C Ail
Snehal P Shetty
Pratheeksha Shetty
Sheikh Mohammed Anas

Mrs. Ramya B. S (Guide)

ABSTRACT:

Create a website-database for easy registration and record maintainance of Student Project Support Schema(SPSS).Provides a base to establish the rule and clauses of the project

program which aids on eliminating error that occurs in manual notification delivery. Maintans record of events under SPSS till date. Overall results of the events will be declared on the website affixed with photographs of the event. Provides a platform where participants can post their queries and the queries posted can be answered by any interested candidate or faculty.

3BE-IS-B-07 - CHEAP ALTERNATIVE FOR VIRTUAL REALITY HEADSETS AND STUDY ORIENTED WEBSITE FOR I/II SEMESTER VTU ENGINEERING SSTUDENTS.

Pooja B
Pooja R K
Razeen Mohammed
Rithika M R

Mrs. Shruthi Ramdas (Guide)

Objective: Virtual Reality Headset and Study Website to provide cheaper alternative to virtual reality experience using card board, lenses and cell phone and to provide study materials to the students of I/II semester students of all brances.

3BE-IS-B-08 – SAFELIVES – HOSPITAL MANAGEMENT SYSTEM

Roshni Joseph Fernandes
Pujitha J. Shetty
Shreya
Pradnya Shyam Vernekar

Mr. Prakhyath Rai (Guide)

ABSTRACT:

This project is basically concerned with hospital database management system. Here, we will build a website containing the following interfaces- a login interface, patient interface, doctor interface. In login interface, we provide authorization to the user getting in based on which he/she will be directed to either the patient interface or the doctor interface. Patient interface provides us the details about patients –name, age, ward number he/she is admitted to, his/her doctor, discharge time, bill, etc. The doctor interface provides us the facilities such as viewing doctor's details including his/her id, qualification, specialization, availability of the doctor, patients he's tending to, etc. It also displays the list of doctors present in various departments. We can search a doctor by his id and then view his details. This interface also provides us the facility to add new doctors in. The main aim of this project is to make accessing the required information user-friendly. Suitable security and privacy will also be provided.

3BE-IS-B-09 - LIFELINE+

Preemal Varsha Pinto
Prithvi Majal
Sanita Nathalia D'Almeida
Sharada Shivanand Mallya

Ms. Jayapadmini Kanchan (Guide)

ABSTRACT:

The physical fitness is a general state of good physical health. The need of developing a health based website is to raise awareness amongst general public. Our mission is to develop a health based website with the ultimate goal of helping the society lead a healthier life. The objective is to promote a healthy lifestyle, which will help the society meet their requirements. The website will let the users know about the precautions to be taken in early stages. It includes medicinal aspects, fitness tips, beauty tips, and the healthy eating i.e. tips for planning a healthy diet etc. The project would be beneficial to the society with respect to health.

Technical details: Front –end: HTML, CSS

3BE-IS-B-10 - BOOK STACK

BOOK SHELF

Rakshith K,
Prarthanna Bhat
Vikshitha J Amin
Srishti Shetty

Mrs. Bhavatarini N (Guide)

Abstract

Developing website for selling old books and notes for students. Its a process of carrying out business and transaction with a help of computer networks. It facilitates online purchasing of second hand books

3BE-IS-B-11 – RANDOM PASSWORD GENERATOR

Suhas Sorake
Nitash
Zafeera Banu
Vasira Fathima

Mr. Vasudeva Rao (Guide)

ABSTRACT

A random password generator is software program that takes input from random or predo-random numbers generated and automatically generates a password. As we know, human mind

is not capable of remembering everything so he creates a pattern which can be recognized or guard by any intruder. So we use random functions to use random characters.

3BE-IS-B-12 - SMART DUSTER

Shivaraj Shanker Biradar
Subbaiah K U
Vaishak Chandra K S
Varun K
U Anush V PAI

Mr. Rithesh Pakkala P. (Guide)

ABSTRACT

Dusty hands of teachers a sight every student gets to see. An innovation to try and reduce this sight in classes daily is DUST SOON. A duster designed primarily for the purpose to reduce hand work by teachers to rub the entire span of the board and also the dust intake during the same period of time. The idea behind our project is the use of electrical wires connected to a power supply which in turn runs the duster along the span of the blackboard cleaning the board sooner also reducing man power to run the board clean. In addition to this to keep the surrounding clean we have planned to collect all the chalk dust and process it via conveyor belts to a box which stores all the chalk dust. And this in turn will be used to recycle and remake chalks.

3BE-IS-B-13 - SMART SURVEILLANCE SYSTEM AT LOCKER AREAS IN BANKS

Rakshitha
Rashmi G Naik
S P Vishali
Sneha P

Mr. Naitik S.T (Guide)

ABSTRACT:

Surveillance is most important security system in banks and other places also. This type of security system is based on embedded system along with GSM and sensor networks. PIR sensor is used for the detection of the human movements. When there is a movement of human, Infrared motion detectors will sense any intruder near locker areas or trying to enter inside and alert the bank manager or police control room by sending SMS through GSM modem. This highly reactive approach has low computational requirement. This surveillance security system implements using P sensors, PIC microcontroller, GSM and camera. This system will increase the trustworthiness of the customers towards the bank.

Mechanical Engineering
2ND year –A section

Project Id : 2BEMEA01
Project Title : Filtration of waste water for drinking applications
Student Name : Anirudh mallya U
Jonathan R
Ashwith Mendonca
Allan Loy

Guide Name : Dr. Manjunath Patel G C

Abstract : Fresh water is one of our most vital resources and when our water is polluted, it is not only devastating to the environment, but also to human health. Most people living in well populated communities don't face the problem of not getting the clean water. People who live in the remote villages have to face this problem and have to use uncleaned water for their day-to-day activities. With the help of present design of filtration process, it is possible to get purified water within a minute without any external source of power.

Project Id : 2BEMEA02
Project Title : Design and development of black board cleaning system
Student Name : Akshay M
Chandan H Y
Deviprasad Rai
Akash Gupta

Guide Name : Mr. Sandeep M J

Abstract : While using a normal black board, there are lot of dusts while cleaning the black board and many teachers have allergies to the chalk dust. This issue could be solved with a clever automated design and development of the board cleaning system. Simple gear mechanism is attached to a steel plate.

Project Id : 2BEMEA03
Project Title : DUAL WASHING MACHINE RUN THROUGH A SINGLE POWER
Student Name : ADITHYA KRISHNA RAI
KIRAN SHETTY
KARTHIK H
KARTHIK K V
ATHUL V ANIL
Guide Name : Mr. SUHAS
Abstract : This project aims to run a washing machine to save time and Power by using simple shaft mechanism. It is known that washing machine runs through heavy motors, so by giving a simple shaft Or conveyer belt to the washing machine so as to run the other Motor. This project can be extended by using series of conveyer Belts and shaft to the second motor.

Project Id : 2BEMEA04
Project Title : SOLAR BAG
Student Name : ARUN KUMAR
ASHIK NAIK
AMEEN NAZEER
AHMED NAWAF
Guide Name : Mr. B C PRAMOD

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Abstract : The primary resource for a solar bag is solar energy obtained from the sun. The solar energy is stored and is then converted into electrical energy through a series of circuits, which is stored in battery and then used for other work.

Project Id : 2BEMEA05
Project Title : ELECTROMAGNETIC BRAKING SYSTEM
Student Name : ASHWIN
AKSHAYA
AJAY ACHARYA
AMITH ACHARYA
ANOOP RAJ
Guide Name : Mr. RAMAKRISHNA DEVANANDA P

Abstract : Braking system should ensure the safety and comfort of the passengers, driver and other road users. The brake must be strong enough to stop the vehicle during emergency within a short distance. This project represent about minimizing the brake failure in order to avoid the accident. The proper cooling of brake gives anti fade character and efficient operation of the brake. This system provides better response time for emergency situation and keeps safe.

Project Id : 2BEMEA06
Project Title : AUTONOMOUS M-E LEV ATOR SYSTEM
Student Name : BHUVAN SAGAR
KEERTHAN NAIK
DIXIT TANDEL
KARTHIK
DHANRAJ V B
Guide Name : Mr. SANDEEP M J

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Abstract : The main objective of this project is to provide an automated accident preventing elevators at height towers. It deals with two things firstly to avoid accidents or elevator falling and to provide safety to the passengers, secondly with reduction of time for which the crowd is formed over the staircases. IR sensors and ultrasonic sensors are used to detect the freely falling elevator from the greater height. The slow stopping of the elevator is done by the principle of electromagnetic effect.

Project Id : 2BEMEA08
Project Title : THERMAL POWER PLANT

Student Name : CHARAN RAJ
DARSHAN S BHUT
JANMITH J SHETTY
AKSHAY RAI
KIRAN C M

Guide Name : Mr. SUHAS

Abstract : Thermal power plant is the major tower of generation of electricity for any developing country. Around 60% of electricity generation in our country is met by thermal power plants. Fuel is blown into the combustion chamber of the boils where it is burnt at high temperature where heat energy converts the water into steam. High energy steam is passed through the turbine and the steam creates the force on the turbine causing the shaft to rotate at higher speeds. A generator is connected at one end of the turbine shaft which generates power. The power plant are said to emit large quantities of fly ash which destroy the surrounding environment. These plants also consume a large amount of water. Due to these problems they require a proper environment impact assessment before commencement of the project has to be done.

Project Id : 2BEMEA09
Project Title : REGENERATIVE BRAKING SYSTEM

Student Name : DARSHAN N P
RAKSHITH B
DEEKSHITH D
AMITH GUPTHA

Guide Name : Mr. ASHOK KUMAR

Abstract : The model comprises a moving wheel arrangement with induction braking system that creates regeneration of eclectic energy to charge the battery. In a regenerative braking system the electric motor is responsible for all parts of electric or hybrid electric vehicles and does most of the braking. When the driver steps on the brake pedal, instead of conventional friction based braking system, it sends an electrical signal, used to run in reverse model which creates resistance to slow down the vehicle. This braking system can replace drum brake system which is still used with disc brake.

Project Id : 2BEMEA11
Project Title : CASE STUDY AND DEVELOPMENT OF BIOGAS

Student Name : GOWRI GANESH
ABHISHEK Y K
MOHAMMED ADIL
ALISTER LASRADO

Guide Name : Mr. VIKAS G

Abstract : Since many years, many of us are using LPG to fulfill our basic fuel necessities. This LPG on one hand is easily accessible and on the other hand it is an exhaustible source of energy. Research says that in the next 50 years these fuel will be exhausted completely from the earth keeping this in mind, new alternate solution is made in our project and that is biogas. Particular village is selected and a model is built which can be implemented in the village as bio gas is eco friendly approach to the increasing fuel demand.

Mechanical Engineering **2ND year –B section**

Project Id : 2BEMEB01
Project Title : MAGNETIC CHIP COLLECTOR

Student Name : RAKSHAN C NAIK
SAGAR S K
SAGAR S HADAGALI
PREETHESH K
NITHESHA

Guide Name : Dr. MANJUNATH PATEL

Abstract : It is pathetic to have a machine shop free from metal chips. It is not favorable to use a normal used vacuum here, the magnetic chip collector is designed so far is time consuming while collecting the chip and dumping to its bin and is not accurate. The presence of metal chips in d machine shop is hazardous and is uncomfortable to the operator. The designed magnetic chip collector like in laborious fast, accurate, compact and inexpensive.

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SPSS-2017 PROJECT REPORT

Project Id : 2BEMEB05
Project Title : DESIGN AND ANALYSIS OF PAPER CUTTING MACHINE USING GENEVA MECHANISM

Student Name : IMTHIYAZ JUANID
MOHD SAMEER
MOHD SAFWAN
MOHD ISHFAQ
NABEEL BAVA

Guide Name : Mr. PRASAD CHANDRAN

Abstract : This paper presents a kinematic study of a mechanism incorporates a geneva wheel and a gear to achieve intermittent motion. The motion of the non circular gear pair is determined by reducing the extreme jerk of the geneva wheel. The design and fabrication of paper cutting machine using geneva mechanism is useful to cut papers in equal and accurate dimensions. Due to which paper is round btw the in touch of cutting wheel.

Project Id : 2BEMEB08
Project Title : MECHANICAL TYRE LIFTER

Student Name : RAHUL
RAHUL
RATHAN J
RAYEES HUSSAIN
SARVOTHAM K

Guide Name : Mr. VIVEK BHARADWAJ

Abstract :

The removal and installation of heavy duty tires and wheels can be difficult, consuming process that sometimes involves two or more technician. A single technician using vehicle lift can lift the truck to a comfortable working height, raise the wheel lift to create the wheel, remove the lug nut and lower the wheel to the ground without strain. A job that used to require multiple people can now be completed by one operation.

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SPSS-2017 PROJECT REPORT

Project Id : 2BEMEB09
Project Title : ROBOT ARM

Student Name : SAURAB SAMAN R
LIKITH POOJARY
PRANJAL RAI
SAGAR DEVADIGA
SAMARTH SHETTY

Guide Name : Mr. VINAY B U

Abstract : Robotic arm is used to pick and place things and it is used to reduce mass work. The links of such manipulator are connected by joints allowing rotational motions and the links of the manipulator is considered to form kinematic.

Project Id : 2BEMEB15
Project Title : ADVANCED SOLARISED AGRO SPRAYER

Student Name : PRAHALLAD
PRATHEEK J RAI
PRATHICK CHANDRA
PRAVEEN K P
SAHIL RAJ

Guide Name : Mr. SUHAS

Abstract : Energy is the most basic and essential of all resources. Most of the generation of energy in our modern industrialized society is strongly dependent on very limited nonrenewable sources. In the present small scale agro sprayers are used on commercial hands. The main advantage of the invention is pumping the air pressure to spray the pesticides by using hands with weight on the shoulder.

Project Id : 2BEMEB16
Project Title : COMPACT PORTABLE REFRIGERATION

Student Name : MANISH KUMAR
MOKSHITH
PRAJWAL B R
PREETHAM
PUSHPAK

Guide Name : Mr. PAVITRA AJAGOL

Abstract : Thermodynamic cooling uses the peltier effect to create a heat flux between the junctions of two different type of materials

Mechanical Engineering
2ND year –C section

Project Id : 2-BE-ME-C01
Project Title : Mechanical Water Tank Cleaning

Student Name : Anudeep G L
Dhanaraj Y K
Rakshith H
Gopala Krishna Sharma D
P Sumanth Shenoy

Guide Name : Mr. Naveen. B

Abstract : Water tank cleaning system is a process of cleaning the tank mechanically in a hygienic manner. It saves the time and energy of the human labor, it works without electric power, after cleaning the tank a drain pipe is used to remove the dirt inside the tank.

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SPSS-2017 PROJECT REPORT

Project Id : 2-BE-ME-C02
Project Title : Waste plastic into printing ink and fuel.
Student Name : Varun Karkera
Shruthesh D Rai
Vishal
Shreyas P
Suman Raj
Guide Name : Dr. Rathishchandra Gatti

Abstract : The principle is used in the conversion of plastic into fuel is done by pyrolytic breakdown without the presence of oxygen & condensed below room temperature. So obtained oil is then collected and distilled to obtain the fuel of required type. After heating is done inside in a tight chamber, raw ash is been collected. This obtained ash taken as a raw material for the preparations of ink, the process is further continued by the additions of suitable binding agent such as liquid glue and volatile material such as toluene.

Project Id : 2-BE-ME-C04
Project Title : Anti Suicidal Fan
Student Name : Vikas K G
Suraj Lois D'Cunha
Tilak N Naik
Shravan C Shetty
Supreeth V Bhandary
Kishore K H
Guide Name : Mr. Prasad Chandran

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Abstract : This project is based on a major social problem suicide; hanging is one of the easiest ways to suicide. According to national crime record bureau data, out of 130000 people who suicide each year, 60000 used to hang themselves. Therefore our team has come out with an idea to prevent suicide. We have used one piston and cylinder arrangement. We have welded it to the rod of a fan. Whenever someone hangs himself the rod will come down due to the weight acting in it. Hence the people will land safely on the floor thus preventing death.

Project Id : 2-BE-ME-C011
Project Title : Active welding shield

Student Name : Sudesh N Acharya
Gagan R Shetty
Vishu Kuamr
Prakash M
Prajwal Shetty

Guide Name : Mr. Prasad Chandran

Abstract : In the present place of growing technology and industrial development, welding has been an ever importance process of joining metals. May be in a small scale garage or in multinational industries the welding is done manually, many times. The main drawback of normal welding shield is that the time gap between the moment at which the electrode touches the metal and lowering face with the welding glasses is way too high, because of this time delay there is a high rush for the operator and also for the perfection of the work done. To prevent all these, we introduce active welding shield mainly brought up in the perspective of safety of work, when it is designed and crafted in such that as soon as the spark begins then just with a lap of a button the welding shield glasses come out into the closing position and thus preventing the sparks from entering the eyes or face.

SPSS Dept. Coordinator

HOD

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Department of Mechanical Engineering

III Year – A section

Project Id : 3BEMEA01
Project Title : LEVITATING WINDMILL
Student Name : Len J Sequeira
Kaushik S Damodaran
Kowshik M L
Manish U S
Guide Name : IMPHA Y D
Abstract : Levitating windmill is the future technology for producing power which is renewable source of energy which produces twice more energy than the regular one; this levitating windmill is less expensive than the tradition windmills.
Gas container is filled with gas of low density which can float high up in the air, this leads for producing of energy twice more than regular ones.

Project Id : 3BEMEA02
Project Title : CONCENTRATE PHOTOVOLTAICS WITH LIQUID COOLING
Student Name : Bharath Chandra C P
A N Harshith
Aditya V Rao
Gautham
Anuranj M
Guide Name : PAVITRA AJAGOL
Abstract : This project uses Fresnel lens to focus sunlight onto the solar panel so that light is incident on them. This is mainly done to improve the efficiency of power and corresponding changes in the efficiency of power and corresponding changes in temperature is studied in order to design some highly efficient concentrated photovoltaic modules.

Project Id : 3BEMEA04
Project Title : FABRICATION OF SPROCKET SIDE STAND RETRIEVAL SYSTEM FOR TWO WHEELERS
Student Name : Babil P V
Abdul Hakeem
Akhil Karunakaran
Thameez
Akash P P

Department of mechanical Engineering

Sahyadri College of Engineering & Management

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Drishyanth Dinesh

Guide Name : MAHADEV

Abstract : In modern world the living status were developed and developing are equipped. The automobile takes a great part in the development since it plays one of the major part key in daily life. Sprockets side stand retrieval system helps to disengage the side stand of two wheels and helps save the life of a rider.

Project Id : 3BEMEA05

Project Title : GENERATION OF ELECTRIC POWER USING SPEED BRAKER

Student Name : Amith B Shetty

Diganth Rai

Ashwath Kumar

Akshay Bangera

A Shreehari Acharya

Guide Name : RAKSHITH SHETTY

Abstract : A large amount of energy is wasted at the speed breakers through friction. So electricity can be generated using the vehicle weight as input. As vehicle pan over the speed breakers they make the reciprocating pump to pump the water at a greater pressure. This makes the turbine to rotate at higher velocity. Thus generation of electricity takes place. This method is an effective way to produce electricity as the number of vehicle on the road are increasing, also the cost of effectively place near traffic, at the entrance of parking lots and many other places. It provides an efficient electricity from the K .E of moving vehicle.

Project Id : 3BEMEA06

Project Title : HYBRID VEHICLE REGENERATIVE BRAKING SYSTEM

Student Name : Harsha Rama Bhat

Flaven Glen

Abhilash

Ganesh Prasanna

Jayaprakash

Guide Name : PRASAD CHANDRAN

Abstract : Regenerative braking refers to a system in which the kinetic energy of vehicle is stored temporarily as an accumulative energy and is used in fuel cells. Regenerative braking is a small, yet very important , step toward our eventual independence from fossil fuels. These kinds of brakes allows

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batteries to be used for longer periods of time without the need to be plugged into an external charger.

Project Id : 3BEMEA07
Project Title : HYDRO POWER GENERATOR USING RAM PUMP
Student Name : Akshay Anand
Gagan Sura
Gowtham P
Jeevan Lobo
Yaser

Guide Name : KIRAN PRAKASHA A

Abstract : This project uses a ram pump to generate electricity. Water flow from a low head can be pressurized using water hammer effect. Hence when the water passes through the nozzle at high speed could be directed and made to impact on pelton wheel to generate electricity. The micro hydropower plant can easily be adopted for remote environment especially in regions having scarcity in available of water since most of component including the ram pump can be fabricated locally.

Project Id : 3BEMEA07 *
Project Title : FABRICATION OF MULTITASKING MACHINE
Student Name : Abdul Khader Munas
Ahmed Shiyad M S
Mohammed Shamsan
Karthik S K
Anish Rayan

Guide Name : VINAY B U

Abstract : Modern day application requires light weight multipurpose drilling, grinding and domestic machine. The cost of motor constitutes about 50% of total cost making the individual pay each time for motor. Our aim is to run multiple application by having a common motor. Attachment for various applications will be connected to connector. All attachments are designed with common motor.

Project Id : 3BEMEA08
Project Title : DESIGN AND FABRICATION OF TRAPEZOIDAL PIANO KEY WEIR
Student Name : Manjula r
B Vani Rao
Divya H M

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Saksha
Anisha R Shetty

Guide Name : LAWRENCE J FERNANDES

Abstract : PKW has been invented in the last decade to increase the discharge capacity of hydrostatic structure. Geometrical parameters of TPKW models were varied under different flow conditions and effects on discharge, coefficient of discharge (C_d) were investigated. C_d values were found to be mostly influenced by Cross section whereas W_i/W_o has least effect. TPKW has higher discharge efficiency in comparison with RPKW.

Project Id : 3BEMEA09

Project Title : REGENERATIVE BRAKING SYSTEM

Student Name : Aniket Naik
Gagandeep M
Deep K Kapadi
Deelan Felix
Akshay Kumar

Guide Name : MAHADEV

Abstract : Regenerative braking refers to a system in which the kinetic energy of vehicle is stored temporarily as an accumulative energy and is used in fuel cells. Regenerative braking is a small, yet very important , step toward our eventual independence from fossil fuels. These kinds of brakes allows batteries to be used for longer periods of time without the need to be plugged into an external charger.

Project Id : 3BEMEA10

Project Title : FABRICATON OF SYSTEM WITH SEGREGATION OF WASTE, BURNING OF WASTE AND REUSE OF HEAT ENERGY EXHAUSTED

Student Name : Karan Kumar Rai
Kiran
Kishan Kumar H
Madhusudhan Yadiyal K S

Guide Name : VINAY B U

Abstract : In houses/places where there is no proper waste management system, usually people dispose the household wastes by burning the waste in an open space, mostly inside their own plots. In this case most of them burn plastic and organic wastes together. There are lot of disadvantages in this

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method and these can be solved by simple waste management setup which burns green waste separate from plastic and enables green waste to prepare fertilizer whereas plastic is melted by absorbing heat from green waste combustion ,and melted plastic is converted to useful plastic block. The steam produced from this burning is passed through a nozzle and made to impinge on a dynamometer for producing electricity also can be used to get hot water from cold water as cold water is made to pass through coils.

Project Id : 3BEMEA12
Project Title : PIPE NOTCHING MACHINE
Student Name : K Naga Prajwal
Abhishek Kekada
Manish N Amin
Laveen Kumar
Guide Name : Naveen B
Abstract : Notching is a metal cutting process used to on sheet metal of thin barstock, sometimes on angle sections or tubes. This precision pipe is a machine designed for a accurate fast and easy notching of pipes in required angles. It uses a hand drill connected to a notching tool for rotation of the tool. The rotation of tool thus removes materials when contacts the tube surface.

Sahyadri College of Engineering & Management

SPSS-2017 project reports

Department of Mechanical Engineering

III Year – B section

Project Id : 3BEMEB01
Project Title : MULTI WHEEL NUT REMOVER AND TIGHTENER TOOL
Student Name : NIKITH N SHETTY
NAGABHUSHAN S P
PUNEETH KUMAR
NITHESH M
NITHESH KUMAR
Guide Name : AJITH B S
Abstract : This project aim is to design and fabricate four wheel nut removing hand operated tool for tightening and removing of four nuts in one stroke. With the increment number of car on the road the number of car problem due to tyre failure has increased often the car is provided with tyre wheel nuts nevertheless due to difficulty in applying torque to remove nut and to save time. We develop tool having a gear planetary mechanism. In our project we tried to focus on the minimization of human effort for fixing all four nuts of 100mm pcd wheel in one time. The main objective of work is to develop a single tool which can be made use during assembling and disassembling of wheel in automobiles.

Project Id : 3BEMEB02
Project Title : MANUAL GRASS CUTTER
Student Name : SHRAVN KAMATH
SAGAR
NIXITH SHETTY
ROHITH HEGDE
SUDARSHAN
Guide Name : AJITH B S
Abstract : These day, problems like pollution, powecut etc. In order to overcome the problem a device which can perform the function without causing any of the any of these problems.

Sahyadri College of Engineering & Management

SPSS-2017 project reports

Project Id : 3BEMEB03
Project Title : DESIGN OF AUTOMATED ARECANUT COLLECTOR
Student Name : ANUBHAV R SHETTY
KARTHIK D
VAIBHAV H R
RAGAVENDRA BAIPADITHAYA
Guide Name : SHIVAKUMAR K M
Abstract : Normally arecanut agriculturists uses areca collecting showel to collect the arecanuts from the ground which is more difficult, time consuming and rquires more man power. collecting areca involves 3 basic steps, initially arecanut is pilled , collected into the buckets and finally it is poured into the bags. So in order to reduce this, the special design of automated areacanut collector is done which performs all the above said steps with reduced man power and work hours.

Project Id : 3BEMEB04
Project Title : AFFORDABLE SOLAR POWERED AGRICULTURAL DRYER FOR FARMERS
Student Name : SANDESH DEVADIGA
RAGAVENDRA SHETTY
SUJAY
SHREEJITH K M
Guide Name : Dr.Rathishchandra Gatti
Abstract : An affordable solar powered agricultural dryer for rural farmers is proposed with multiple drying uses such as drying crops, cash crops, seeds etc. there is no controlled heating takes place. The dryer is radical change of its predecessorproduct-eco SD premium which was completely manually operated. In the proposed solar dryer the PV array is used to run the fan to blow air into heating chamber for conversion of heat. A lens is used to concentrate the solar flux on the heating chamber. Fire attachment is provided to dry the products during winter, monsoon and sunny days.

Sahyadri College of Engineering & Management

SPSS-2017 project reports

Project Id : 3BEMEB06
Project Title : REGENERATIVE SUSPENSION-1
Student Name : SCARIA
SHYAM N
ABDUL SAMAD
SAVISH KUMAR
Guide Name : Dr.Rathishchandra Gatti
Abstract : The proposed project is to develop a multidegree of freedom regenerative telescopic suspension system that can generate energy due to shock waves transmitted from road imperfections. Wasted kinematic energy of the shocks and road vibrations transmitted the vehicle chasis , this is achieved by electromagnetic inductions.

Project Id : 3BEMEB07
Project Title : REGENERATIVE SUSPENSION-2
Student Name : SUHAIL P
SHIHABUDDIN
RAMEES M T P
Guide Name : Dr.Rathishchandra Gatti
Abstract : A regenerative shock absorber provides an additional function of generating the wasted kinetic energy of the shock and road vibrations transmitted to the vehicle chassis through it. This is achieved by electromagnetic induction based energy transduction where in the power is generated by relative motion between the electromagnetic masses.

Sahyadri College of Engineering & Management

SPSS-2017 project reports

Project Id : 3BEMEB09
Project Title : STYROFOAM CASTING
Student Name : MOHD LUCKMAN
MOHD MANSOOR
MOHD SAFUVAN C A
MOHD SUHAIL
Guide Name : Mr. RAKSHITH H S
Abstract : Casting is a manufacturing process in which a liquid material is usually poured into a mould which contains a hallow cavity of desired shape and then allowed to solidify. Types of pattern material used commonly are wood plastic metal plasters gypsum cement for making exact replica of the product. i.e pattern is very difficult to by using above mentioned materials, to overcome this problem, Styrofoam casting method is used in which shape and work can be performed easily by passing through a hot wire.

Project Id : 3BEMEB10
Project Title : SPRING LOADED EXOSKELETON
Student Name : SARVESH MARTHA B
SHASHANTH P
SUMBRUDH C HEGDE
RAHUL D GODBOLE
Guide Name : Mr. AJITH B S
Abstract : About 80% of Indian population are labours, generally they are intended to carry loads. These loads sometimes may vary more than the safely value. These jobs environment requires them to carry heavy load over their head. This continuing over long time puts direct effect on their body. These include spinal injuries, irregular blood flow etc, as the workers depends on daily wages and this the only form of life support.

Department of Mechanical Engineering

III Year – C section

Project Id : 3BEMEC01
Project Title : MINI COOLING TOWER
Student Name : VIVEK SHETTY
VISHWAJEETH M
NITHIN ACHARYA
AKSHAY SHETTY
Guide Name : Mr. SANDEEP
Abstract : This project is a process of revolving heat from substance under controlled condition. In a reverse system which pumps the heat from a cold and deliver it to a heat body. The system which works on excretion of heat from cold body and converts it to a heat body is called cooling tower.

Project Id : 3BEMEC02
Project Title : DESIGN AND FABRICATION OF PORTABLE BIOGAS DIGESTER MODEL.
Student Name : NIRANAJANA K J
MANJUNATHA K
PAVAN KUMAR K
SHEKSHAVALI B
PRAMOD KUMAR K
Guide Name : Mr. HANUMATHARAYA R
Abstract : This project mainly concern over the effective and efficient utilization of the available raw materials for the production of biogas. Portable biogas digester is designed in which effective utilization of renewable resources are done. The projects mainly concerns over increasing issue of waste management in urban areas as well as production of biogas using these waste.

Sahyadri College of Engineering & Management

SPSS-2017 project reports

Project Id : 3BEMEC04
Project Title : INVISIBLE HELMET
Student Name : SHABEER K I
PREETHAM K J
PRATHAP S J
YATHISH JOGI

Guide Name : Mr. RAKSHITH H S

Abstract : Nowadays youths are crazy about riding bikes without wearing helmets. They are not conscious about their safety instead they give priority to their hairstyles. According to the present records there are lot of examples of death incidents on the road by two wheeler. An invisible helmet is an automotive safety resistant system for a rider in two wheelers. This system consists of flexible nylon airbag with helium and tiny gas inflator designed to inflate rapidly during collision of vehicles. This helmet forms hood around the riders head that resists the impact.

Project Id : 3BEMEC10
Project Title : VEHICLE STARTING SYSTEM USING LICENCE
Student Name : KEITH PAIS
PRAMOD BHANDARY
KRISHNA BHAT
VIJETH RAI

Guide Name : Mr. VAISHAK N L

Abstract : India is an expanding hub for the automobile world field with a lot of motor heads buying expensive vehicles. Where there are expensive vehicles there is a possibility of theft and misuse by people and minors. So the project main motive is to prevent such incidents so that there is no loss of life. The project ensures safety of vehicles and the individuals along with keeping the societies safe.

Sahyadri College of Engineering & Management

SPSS-2017 project reports

Project Id : 3BEMEC07
Project Title : RADIO CONTROLLED AIR BOUT
Student Name : NANDA KUMAR
SHREYAS C H
CHOWISH KUMAR
NAGARAJ G M
Guide Name : Mr. HANUMANTHARAYA
Abstract : INDIA is in the path of development. The project AC air bout play an important role in security like videography and photography. The air bout used here is totally controlled using RC control system an dit can be controlled with GPS system and it is capable of taking the pots in the dangerous situation like war or natural disasters.

Project Id : 3BEMEC08
Project Title : REMOTE CONTROLLED MOTORIZED SCISSOR JACK
Student Name : RAMANA N V
DHANRAJ K
ANJAN J RAI
SUSHANTH SHETTY
NAYAK AKSHAY
Guide Name : Mr. SANDEEP
Abstract : An automatic jack is a device used to raise all the parts of a vehicle in order tto facilitates repairs. most people are familiar with basics of scissor jack manually operated. in this project an electric motor is integrated with scissor jack and power supply from DC battery thereby mechanical advantages increases.

Project Id : 3BEMEC11
Project Title : GRASS CUTTER USING SOLAR POWER
Student Name : VIJAY KUMAR
SURENDRA R UCHIL
MOHD ASHFAK
MOHD SINAN
SANDEEPA M
Guide Name : Ms. IMPHA Y D

Department of mechanical Engineering

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SPSS-2017 project reports

Abstract : The project describes about implementation of grass cutting machine by using the application of solar energy. This method used for gaining the data is from the reasonable existing grass cutting machine. Here to modify the existing grass cutting machine to introduce the sliding arrangement, the improvement of the design grass machine finally will be able to meet the user requirements and satisfaction of lawn movers.

Project Id : 3BEMEC17
Project Title : SELF PROPELLING DRIVE TRICYCLE
Student Name : RATHAN SANGOLLI
BHARATH KUMAR
MANJUANATH MEHTHA
GANESHA K M
VISHWANATH A C
AVINASH K

Guide Name : Mr. AJITH B S

Abstract : There are lot of technology advancement in mechanism and engines which are based on external sources. This project is advancement of mechanism which is not based on any kind of external sources. This is a development of present tricycles and wheel chairs to design and fabricate the threewheel base chair cycle to help physically challenged people for their easy travelling and also for common people. To reduce the human effort for driving without using any kind of sources like petrol, diesel , gas etc.

SPSS Dept. coordinator

HOD

Department of mechanical Engineering

ID-01:Active Tracking and Communications System for Motor-racing

Students: Jagath Biddappa (ECE),Rohit Choudary(ECE),Navajith Karkera(ME),Suraj Shettigar(CSE)

Project Guide : Mr. Prasanna Kumar. C

Abstract : The proposed project is designed to provide an effective solution to the problem of maintaining voice communication between two systems, in this particular case, between the Driver of the vehicle participating in track events and his/her crew members located at the base. The system will also relay various vital information like acceleration, velocity, position using GPS technology and much more like vehicle status with future upgrade of the technology. With the proposed technology, the driver will be able to maintain two-way voice communication with a range of 3km to 4km (Open space) with his crew located at the base. Also, information like velocity, acceleration, and position of the vehicle and rider will be transmitted to the crew which can be easily visualized on a portable base station with a range of 5km (Urban area) up to 15km (Open space). The onboard screen will display the information using map services like Google Maps. The data is also logged into the inbuilt storage device which can be useful for analysis and performance improvements of the rider in the future.This project can also be used by the armed forces to track, monitor and communicate with the squad conducting special operations and surgical strikes.Thus, this project is not just limited to the above mentioned applications and is capable of solving various other problem related to long range audio and data wireless connectivity like drones, weather balloons etc.

ID-02: SELF POWERED STRUCTURAL HEALTH MONITORING IOT SENSORS

Students: Ajay K S(ECE),Deelan Felix Concessao(ME),Deekshith N Moily (ECE),Prathviraj Shetty Gautham P(ME),Mahesh Krishna Devadiga(EC),Jeevan(EC),Ranulf Noronha (CS)

Project guide: Dr.Rathishchandra.R.Gatti

Abstract : One of the easiest methods of electricity generation is by using the piezoelectric material. Strain on piezoelectric material causes charge separation which produces electricity. The mechanical energy is converted into electricity and transferred to battery. Potential benefits of this are- there are no wastage of energy to generate electricity, it does not require development of vast areas, there are no moving parts, and they need to be repaired or replaced long after 30 years. Structural health monitoring (SHM) is a damage detection technique that involves placing intelligent sensors on a structure, periodically recording data from the sensors, and using statistical methods to analyze the data in order to assess the condition of the structure. Structural health monitoring offers a powerful method of monitoring structures with a promise of shifting time-based maintenance schedules, which can be costly, to condition based schedules, thus significantly reducing maintenance and repair costs. Additionally, SHM has the potential to reduce the human error involved in monitoring structures and to improve the effectiveness of monitoring systems and the overall safety of structures.so we are designing an four arm harvester with an piezoelectric material on it which when vibrated generates currents . Our aim is to store the current obtained from four arms in a battery and make use of it to run the SHM sensors.