## Research Minds

# Contents

Dr. K Vidyavathi

Writing well is an art that everybody should master in order to be successful. Writing well means conveying thoughts, ideas, and facts in simple and clear language. The art of writing is not something that is taught seriously to us in schools and colleges. Learning to write a research paper is essential in order to excel at both academic and professional levels.

Writing a good paper is an exercise through which you learn: (1) how to research a topic, (2) how to think critically about that topic, and (3) how to coherently express your understanding, analysis and conclusions about the topic to someone else who may or may not be as informed on the subject as you are. The more you write quality essays and papers in college and the more you work to improve your research and writing skills, the better your writing and your analytical skills will become. However, the less you do, the less competitive you will be, and the more likely you may look back, in later years, at your time at SAHYADRI and regret the opportunity you wasted. This is why taking advantage of the 'Research Minds' E-Journal of Sahyadri College of Engineering and Management is so important. Surely, the work involved is great, requiring both time and effort but, do not forget that, Good Writing is essential to success in the kind of careers you will likely want to pursue.

Writing a Research Paper even prepares you for the exams since the topic is related to the course. Your researching, learning and reading for the research paper will help you prepare for the relevant course as well. When you write a research paper for the college journal, that will boost your confidence to publish your research work in the reputed journals. This is a feather in your cap and reflects well on your resume

Given the importance of writing a research paper, do not take research papers lightly. It may seem like a daunting task and it very well should be. But keep in mind that a well written research paper offers rewards that can earn you a scholarship, kick start your career and open a number of opportunities. Therefore, the next time, give it, your best effort.

## Global Economic Crisis and Indian Economy

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**Abstract** - The impact of global crisis on Indian economy is mainly through three distinct reasons viz, the financial sector, exports and exchange rates. In this one main reason is through financial sector. It includes banking sector, equity markets, external commercial borrowings and remittances. In case of Indian banks it was not overly exposed to crisis but only one of the larger banks i.e. ICICI was partly affected but managed to come up later through timely action by government. In case of equity markets, they have seen nearly 60% decline in the index because of foreign investors. Commercial credit from foreign banks has dried up. This had to be replaced with credit lines from domestic banks but at higher interest costs. The aim of this study was to bring out various reasons for economic crisis which are very complex like boom in the housing market, speculation, high risk mortgage loans and lending practices, securitization practices, inaccurate credit ratings and poor regulation. The consequences of the crisis on the Indian economy are in terms of information technology, in terms of exchange rate, in terms of foreign exchange outflow, in terms of investment, in terms of real estate and in terms of stock market. The main aim was to study how Indian economy is being affected by the effects of the global economic crisis.

**Use this link to access the full text -**
http://www.sahyadri.edu.in/e-journal/Global_Economics.pdf

## Extendable Hashing using AVL Trees

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**Abstract** - Increased in the number of data in database leads to the necessarily efficient searching method. one of the simple approach used is sequential search but due to the inefficiency of consuming more seek time of sequential search leads to the further research on identifying a novel approaches providing direct access. in this regard, lot of research has been underway to provide direct access. hashing is the one such approach emerged as a novel approach to provide direct access. some of the limitation of hashing leads to further research on hashing for enhancing its performance. this paper describes one such novel approach using AVL Trees in hashing to reduce the time required to search a element in collision occurred scenario.

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http://www.sahyadri.edu.in/e-journal/Hashing.pdf

## Employee Engagement-A Study at LeeBoy India Construction Equipment (p) Ltd

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**Abstract** - Organizational effectiveness is critical to the success. In order to achieve increased and sustainable business results, organization needs to craft and execute the suitable strategy and also needs to engage employees. Employee engagement is the association of many desirable outcomes such as job satisfaction, commitment or intention to stay and job performance. Organization with many engaged employees typically have lower operating cost, higher customer satisfaction and higher profits. Today's organizations are gaining tangible monetary benefits by investing time and resources in fostering higher engagement within their employees. Employee engagement is the buzz word in the human resource arena; hence task of precisely defining the employee engagement is still going on. But it is most often defined in terms of identification of employee with the work. Engaged employees are prepared to go beyond in search of workplace excellence. They are ambassadors for their organizations, who will speak highly of the company and its people, even when they are not in a work setting. An engaged employee is identifiable by workplace behaviors such as losing track of time as they are so absorbed in the task at hand. This is distinct from excessive overtime in order to give the impression of 'hard work.' Both look the same, but one is productive for the employer-employee relationship and one is not. As the impact of employee engagement on business has been positive and has been linked with higher profitability, practice has raced ahead of the underpinning research in pursuit of creating a more engaged and hence profitable workforce. With this introduction an attempt was made to study the employee engagement at LeeBoy India Construction Equipment (p) Ltd.Bangalore.

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## ATM Skimming

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**Abstract** - Nowadays cyber crime is one of the big issue in the area of computers ruling world. This paper mainly concentrating on one of the category of cyber crime that is ATM skimming. How to control and provide security to ATM using anti skimming devices. Also we are dealing with some of the security aspects by providing the ATM machine accompanied with the electronic detecting methods to improve the security.

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# Commentary

## PEN PC

Pen PC is one of the latest discoveries in the field of technology. Pen PC is a gadget including 5 parts:

• A pen

• Virtual keyboard

• A very small projector

• Camera scanner

• Personal id key

Pen PC makes use of blue tooth which helps in transfer of data or make connections without wires. This is effective because we will be able to connect whenever we need without having wires.

In pen PC role of monitor is taken by LED projector which projects on the screen. The size of the screen is A4 size..It has the approximate resolution capacity of 1024*768.Thus it gives picture of good quality. Frequency used is 2.4GHZ.



Virtual keyboard is new gadget for pc users. It emits laser on the desk where it looks like keyboard having quarty arrangement. It works exactly like ordinary PC.

We can use it as a mouse by

• Pressing nib once for mouse left key, twice for double click.

• Rolling dial for mouse page up and down.

• Press key above rolling dial for mouse right key functionality.

The major advantage of this pen PC is it is small and is portable. It is a 360 deg.visual communication device. The best part in the portable type of computer is its battery i.e. it makes use of Li-ON battery. Usually batteries must be small in size and work for longer time. Normally



it can be used for 2 weeks.

This pen sort of instrument produces both the monitor as well as the keyboard on any flat surfaces from where you can carry out functions we would normally do on your desktop. Thus the latest technology has produced gadgets which are simple and user friendly.

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Source : Internet

# BLUE BRAIN

"Blue brain" —The name of the world's first virtual brain. That means a machine that can function as human brain. Today scientists are in research to create an artificial brain that can think, response, take decision, and keep anything in memory. The main aim is to upload human brain into machine. So that man can think, take decision without any effort.



•After the death of the body, the virtual brain will act as the man .So, even after the death of a person we will not loose the knowledge, intelligence, personalities, feelings and memories of that man that can be used for the development of the human society. No one has ever understood the complexity of human brain. It is complex than any circuitry in the world. So, question may arise "Is it really possible to create a human brain?" The answer is "Yes". Because whatever man has created today always he has followed the nature. When man does not have a device called computer, it was a big question for all .But today it is possible due to the technology. Technology is growing faster than everything.

•**What is Blue Brain?**

The IBM is now developing a virtual brain known as the Blue brain. It would be the world's first virtual brain. Within 30 years, we will be able to scan ourselves into the computers. Is this the beginning of eternal life

**What is Virtual Brain**

We can say Virtual brain is an artificial brain, which does not actually the natural brain, but can act as the brain .It can think like brain, take decisions based on the past experience, and response as the natural brain can. It is possible by using a super computer, with a huge amount of storage capacity, processing power and an interface between the human brain and this artificial one .Through this interface the data stored in the natural brain can be up loaded into the computer .So the brain and the knowledge, intelligence of anyone can be kept and used for ever, even after the death of the person.

**Why we need Virtual Brain**

Today we are developed because of our intelligence. Intelligence is the inborn quality that cannot be created .Some people have this quality ,so that they can think up to such an extent where other cannot reach .Human society is always need of such intelligence and such an intelligent brain to have with. But the intelligence is lost along with the body after the death. The virtual brain is a solution to it. The brain and intelligence will alive even after the death We often face difficulties in remembering things such as people's names, their birthdays, and the spellings of words, proper grammar, important dates, history facts, and etcetera. In the busy life every one want to be relaxed .Cannot we use any machine to assist for all these? Virtual brain may be the solution to it. What if we upload ourselves into computer, we were simply aware of a computer, or maybe, what if we lived in a computer as a program?

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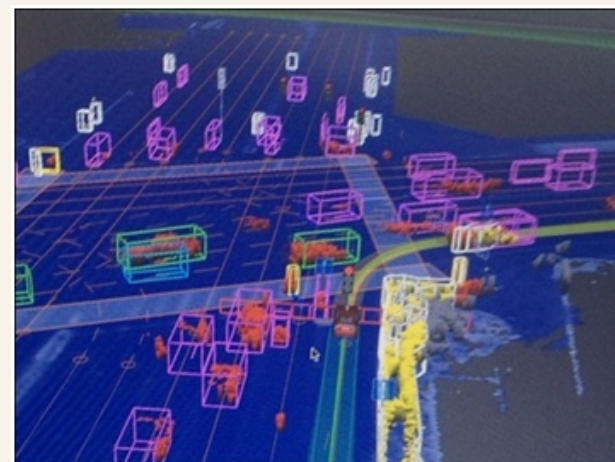VI Sem, Dept of ISE
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Source : Internet

# Google's Driver-Less Car

Driver-less cars will soon be a reality on the roads of Nevada after the state approved America's first self-driven vehicle license.

The Nevada Department of Motor Vehicles has issued the first license plates that will allow Google's autonomous cars onto public highways. The first to hit the highway will be a Toyota Prius modified by search firm Google, which is leading the way in driver-less car technology.

Nevada is the first state to devise licensing procedures for autonomous vehicles, and Google is the one of the leaders in that field, having hired some of the top talent that took part in the DARPA Grand and Urban Challenges.Google's fleet will have red Nevada license plates with a Greek infinity symbol, intended to alert other drivers that a



computer has control of the vehicle.

•The car uses video cameras mounted on the roof, radar sensors and a laser range finder to "see" other traffic. Engineers at Google have previously tested the car on the streets of California, including crossing San Francisco's Golden Gate Bridge. For those tests, the car remained manned at all times by a trained driver ready to take control if the software failed. According to software engineer Sebastian Thrun, the car has covered 140,000 miles with no accidents, other than a bump at traffic lights from a car behind.

This is what the car sees while navigating through the roads.



Bruce Breslow, director of Nevada's Department of Motor Vehicles, says he believes driver-less vehicles are the "cars of the future". Nevada changed its laws to allow self-driven cars in March. The long-term plan is to license members of the public to drive such cars. Google's car has been issued with a red licence plate to make it recognisable. The plate features an infinity sign next to the number 001. Other states, including California, are planning similar changes.

"The vast majority of vehicle accidents are due to human error," said California State Senator Alex Padilla, when he introduced the legislation.

"Through the use of computers, sensors and other systems, an autonomous vehicle is capable of analysing the driving environment more quickly and operating the vehicle more safely."

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Source : Internet

# Guidelines for Submitting Articles

Research Minds is devoted to the publication of original research work undertaken at the Sahyadri College of Engineering & Management, Adyar, Mangalore.  The contents of this E-Journal pertain to research contributions in all areas where active research work is pursued in the Institute.  Authors of articles published in this bulletin, retain the right to publish the contents of the same in other research forums including web-based publications, journals and periodicals.

The E-Journal welcomes the submission of manuscripts that meet the general criteria of significance and excellence. Papers will be published approximately one month after acceptance. All articles published in the  SAHYADRI   E- Journal  will be peer-reviewed.

## The following categories of articles are accepted for publication

### Research Articles

E-journal welcomes original research papers in various areas of Engineering and Technology Management, Health Science, Basic Sciences etc.

- Articles must be no more than 8,000 words, including notes and references. Longer articles will not be processed.
- The Articles should be sent by email.
- Articles should be accompanied by an abstract of a maximum of 200-250 words.
- Authors are requested to follow Sahyadri E journal's manuscript format while preparing their articles.  The manuscript format and example file is posted on
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### Commentary

E-journal invites short contributions to the 'Commentary' section on the latest advancements in Science and Technology, Engineering and Management so that our readers can be up-to-date with the current developments in this competitive world.

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E-Journal encourages readers to comment on articles published in the E-Journal. Submission should be 1000-1500 words

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Readers of E-Journal are encouraged to comment (300-400 words) on published articles to the Letters column.

## General Guidelines

- Writers are requested to provide full details for correspondence:

  postal address, phone numbers and email address.

  (The email address of writers will be published along with the article).

- Authors are requested to prepare their soft copy version in text formats and not in PDF version

- Writers are requested to follow the manuscript template specified and go through the template and example file before writing their paper.

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