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Dr. K Vidyavathi

It is a well known fact that research and technology play an important role in creating growth and progress in developing countries. Robert Solow who won the Nobel Prize in 1987 for his analysis of economic growth stated that 80 % of economic growth is connected to technological advances. Researchers give different estimates, but there is a consensus on the importance of research and technology for growth and welfare. In higher education, research should be put on an equal footing with teaching. IIMs and IITs are well-known for their thriving research culture in higher education. Its importance is undeniable, both in terms of its role in enhancing the quality and reputation of engineering and management education and for creating practical benefits to the teachers, students and the society as a whole.

We are very lucky to get a Research Centre sanctioned and approved by the Government of Karnataka at Sahyadri College of Engineering & Management which already has an excellent reputation for teaching and now we aim to increase the research effort both in fundamental research and in prioritized thematic areas. Research-based learning as an integral component of higher education, particularly in engineering & management helps students grow intellectually. Many descriptive research studies suggest that it is the student-faculty interaction that plays a key role in enhancing student confidence. This is true at SAHYADRI also, where, caring faculty members guide and encourage the students to participate and exhibit their projects, present and publish research papers and articles. Students benefit from the wisdom, knowledge and experience of faculty members, while faculty members benefit from the questions that students ask, the discoveries they make and the energy they bring to the article/project.

In this Issue, Ms.Sandya Baliga in her article “Good HTML vs Better XHTML” explains how XHTML is superior over HTML. Mr.Lokesh in his article on Agricultural Finance analyses the issues and challenges in providing finance to agricultural sector.

Good HTML Vs Better XHTML



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Abstract -Today we are in such a world of web that World Wide Web has become a part and parcel of our day-to-day life. In a matter of few years, we have learnt to use web from our early morning gathering of news online to shopping. It is very difficult for us to think a life without World Wide Web at least in the developing countries like India. The speed at which web sites have come up indicate that web technologies have been developed long back but wasn't known to people. There were less technical books which could possibly give a great deal of knowledge about it. Until recently, programmers learned web software technologies through in house training or by the few courses available. And when it comes to users like us, most of us follow the old traditional methods for applications. There are a number of web technologies using which one can master the art of developing complex web applications. This paper gives you insight of two basic web technologies HTML and XHTML and my preference of using emerging XHTML over the basic HTML.

Use this link to access the full text -

<http://sahyadri.edu.in/e-journal/xhtmll.pdf>

Agricultural Finance - Issues and Challenges



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Abstract -The economic growth and development of India depends on the overall growth of urban and rural area. The primary activity in rural area is agriculture. The agriculture sector has been contributing lot to the growth of the nation by providing employment opportunities to the rural people. The productivity and efficiency of this sector depends on the timely availability of funds at reasonable cost. Commercial banks, Cooperative banks and other micro financial institutions are the players in agricultural finance. The present paper is attempt towards understanding and analyzing the issues and challenges in agriculture finance. The study is based on the secondary data collected from the books, journals and RBI Annual report. The study reveals that commercial and Cooperative banks contributes maximum to the agricultural lending. This is the result of measures taken by RBI and Central government.

Use this link to access the full text -

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WALL-E

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Abstract - Human computer interaction techniques is one of the most researched and innovative topic in the field of Computer Science and Electronics. In our era, we mainly rely on keyboard and mouse for interacting with the computer. It has been the same for two decade or so now. As a new way to interact with computers the multi-touch interface has come into the limelight recently .It is a radical transformation from the previous single touch system. Using this system, you can actually communicate with the system by touching on the screen at two or more points as if they were real objects and hence it's also called tangible interface. Multi-touch is a human computer interaction technique, which allows human to communicate with computers with minimal use of conventional input devices like mouse, keyboard etc.

The proposed system will break down barriers between users and technology by changing the way people interact with all kinds of everyday content, including photos, music and games. For the above system we use the windows environment, along with python programming language and open GL graphics library.

GESTURE BASED COMPUTING

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Abstract - Ever since Steven Spielberg's 2002 sci-fi movie Minority Report, in which a black-clad Tom Cruise stands in front of a transparent screen manipulating a host of video of images simply by waving his hands, the idea of gesture-based computer interfaces has captured the imagination of technophiles. We've evolved over millions of years to sense the world around us but arguably the most useful information that can help us make the right decision is not naturally perceivable with our five senses, namely the data, information and knowledge that mankind has accumulated about everything and which is increasingly all available online. Although the miniaturization of computing devices allows us to carry computer in our pockets, keeping continually connected to the digital world, there is no link between our digital devices and our interactions with the physical world. We are bridging this gap by bringing intangible, digital information out into the tangible world, and allowing us to interact with this information via natural hand gestures.

Commentary

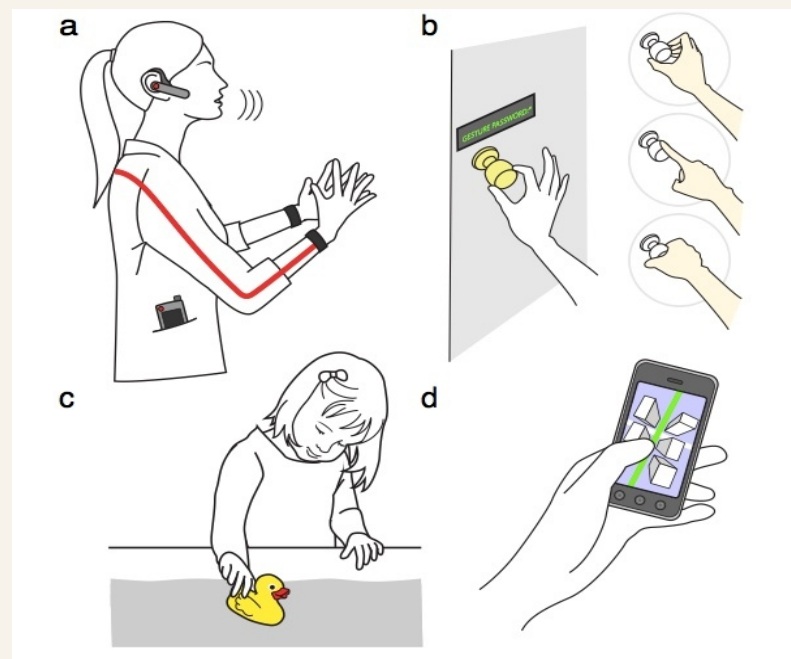
Disney Touché Sensing Technology For Everyday Application

Disney Research has revealed a new sensing technology called Touché that uses a novel concept of Swept Frequency Capacitive Sensing (SFCS). The conventional capacitive touch sensing, that we know of, operates at a single frequency, which allows for single capacitive reading. In simple words, the human interaction with the touch screen can be termed binary – either you are touching or you are not. So, this SFCS technique sweeps

making sure that only a single wire is sufficient to make objects and environments touch and gesture sensitive.

During their experiments, the research team began with adding complex touch and gesture sensitivity to everyday objects and went further to test it on the human body and liquids.

Figure 1: Touché applications: (a) on-body gesture sensing; (b) a smart doorknob with a “gesture password”; (c) interacting with water; (d) hand



postures in touch screen interaction.

They demonstrated the capabilities of Touché technology with five example setups from different application domains and conduct experimental studies that show gesture classification accuracies of 99% are achievable. As microprocessors have become steadily faster and less expensive, it now is feasible to use SFCS in the touch interfaces.

over a range of frequencies. Passing this information to a recognition engine we get a provision for a wide variety of touch gestures; for example – not touching, touching, pinching or grasping.

The Touché project is being developed at Disney Research Pittsburgh by Ivan Poupyrev in collaboration with Munehiko Sato (University of Tokyo) and Chris Harrison (HCII, Carnegie Mellon University). Their focus is on detecting a touch event and simultaneously recognizing complex configurations of the human hands and body during touch interaction. The authors made things simpler by



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Source : Internet

Commentary

Flying Robots Equipped With 3D Sensors For Area Surveillance

We might soon be having Jetsons-like surveillance, with flying robots to monitor the area for us. This kind of surveillance is achieved using 3D imaging sensors fitted on the flying robots that also prevent them from crashing into each other.



The flying bot

The sensors, created by researchers in Germany, use short pulses of light to identify the presence of objects surrounding them, which, as the researchers state, shall provide more elaborate information than the radar systems. The technology is so designed, that they could be easily fitted to the aerial bots, allowing a swarm of them to fly independently over events such as the soccer matches, or say transmitting images back to the control center of outbreaks of violence or criminal activity, etc. Werner Brockherde, HOD at the Fraunhofer Institute for Microelectronic Circuits and Systems (IMS) in Duisburg, stated that the sensors can compute 3D distances quite effectively, and that they have a higher local resolution as compared to radar.

The airborne bots with mounted sensors are efficient enough to pick out objects measuring 20cmx15cm at ranges as far as 7.5cm. Rate of



image transmission is 12 images per second. SMOOTH! The sensors are assembled with CMOS circuit technology, similar to that present in mobile phone cameras, and they put to use the time-of-flight principle to calculate distance travelled by light. To avoid the bright ambient light from covering the signal, the electronic shutter of the signal remains open hardly for a few nano-seconds.



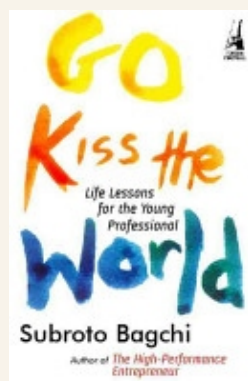
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Source : Internet

Book Review



Go Kiss the World: Life Lessons for the Young Professional

By SUBROTO BAGCHI, Penguin Global (August 5, 2009)



Reviewed by

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Generally books are considered as beacon to Life, it motivates in every stages both in critical and happy moment of life. Indeed inspirational books have been truly helped the distinguished personalities to revolutionized the system from time to time History is the glaring example. Francis Beacon has aptly pointed out that some books should swallow, some book should chew and some book should be digested. Subroto Baghchi's GO Kiss the World comes in the last perception of Beacon.

The book mainly focuses the lesson that life has taught to the author, how he converted every challenge into opportunity and explored the knowledge skill for the betterment of his career. This frame of attitude encouraged him to experiment his thoughts into different roots and gave him the confidence to establish a company 'Mind Tree'. This achievement gives message to the budding entrepreneurs that commitment sincerity, humility and sense of foresighted behaviors would help to fulfill the dreams and aspirations of an individual. He also proved

that even non IT background people could bring changes in the field of Information Technology

The Books is divided into three parts just like the distinct phases of any Human life, his childhood as the first part, his early childhood from the interior lands of Orissa where he started of his career, then his growth as management executive trainee of DCM factory to IT Software Parks of Bangalore as the Second Part and the third part deals with his own Rebirth in his forties, of starting a company of his own Mind Tree and becoming a Gardener of the company. It's a Journey of simple man from the lands of rural part of Orissa; who has become one of the Co-founders of Mind Tree, and now it is considered as one of the most admired software companies of India. This Book looks like an Autobiography of the author full of wisdom pearls and provides tips for young people who want to become entrepreneurs.

Continued....

It is my perception that the Management students should make an attempt to inculcate the Ideals values and business ethics of the author to achieve magnanimous things in their lives. I also believe that the life history of the author certainly boast the energy of readers because Author explores various concepts like physical displacement, keeping faith in adversity, grace under pressure, and power of mentoring, amongst others. The Book is full of inspiring quotes and lessons about displacement, progress, adversity, future of Desire and fate, successes and failures of the Life and times of SubrotoBagchi'slife.

The Author recalls and recollects his childhood and all that was happened around him as if they had happened recently. The simple language with ideal quotes makes the reader happier. He makes us to undertake the Journey and making us realize that we all can win with hard work. He narrates about displacement of his family gave the launching pad to achieve progress in life. He remembers the role and contribution of his mother in moulding his character to reach greater heights in life and unfolds with utmost pride that his mother stood like rock in every

moments of his life that really pushed him to stand as towering personality in field of business.

Each chapter of the Book teaches the lessons that author learnt, it also gives information and shift from DCM to Mind Tree I have picked up some of the lessons from this book which I do use to illustrate in my classes "Management and Entrepreneurship". Author also through narrates on art of giving and forgiving, which we can inculcate in our day today life. And finally The Key to Happiness is not Just Money, but may be the end of Happiness.

Thus it is my conviction that the life history of galaxy of men truly help for endless generation and encourages them to do many wonders in life. I hope Go Kiss the world will become the torch bear to the direction less generation!

"If a country is to be corruption free and become a nation of beautiful minds, I strongly feel there are three key societal members who can make a difference. They are the father, the mother and the teacher- Dr. A P J Abdul Kalam."

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