THE BYTE

October 2014

An E - MAGZINE

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THE CEO OF INDIAN ORIGIN

BY : Dr. Pankaj Agarwal
HOD , DEPT. OF CSE

SHANTANU NARAYEN

Age: 50 years

Designation: CEO, Adobe Systems Inc since 2007; board member, Pfizer

Education: A master's in computer science from Bowling GreenStateUniversity, an MBA from Hass School of Business, a bachelor's degree from OsmaniaUniversity

Past work: At Apple; co-founded Pictra Inc

Claim to fame: Appointed member of US President's Advisory Management Board in 2011; selected as one of "The TopGun CEOs" by Brendan Wood International; started his career at Apple and later served as director of desktop and collaboration products for Silicon Graphics.

Memorable Quote

"Early in my life in India, I did not necessarily go to the 'right' schools, and I didn't always take the 'right' jobs. I didn't even get the 'right' grades. And I really didn't have that much of a long-term career plan, beyond having an impact and adding value wherever I could. The unexpected will happen, and you will adjust, no matter what any master plan or spreadsheet said anyway."

Satya Nadella

Satya Nadella is the current Chief Executive Officer of Microsoft. He was appointed as CEO on 4 February 2014, succeeding Steve Ballmer.

As Satya Nadella becomes the third CEO of Microsoft, he brings a relentless drive for innovation and a spirit of collaboration to his new role. He joined Microsoft 22 years ago because he saw how clearly Microsoft empowers people to do magical things and ultimately make the world a better place. Many companies, he says, "aspire to change the world. But very few have all the elements required: talent, resources and perseverance. Microsoft has proven that it has all three in abundance."

RAKESH KAPOOR

Age: 55 years

Designation: CEO, Reckitt Benckiser Group Plc

Education: An MBA from XLRI; bachelor's degree from the Business Institute of Technical MBA

Past work: Former board member, Madras Cement

Claim to fame: Head of the world's fifth-biggest household goods maker; in the last two years as chief executive officer, Kapoor has been credited with reorganising the company around emerging markets and is leading a push into higher-margin healthcare products - Durex condoms and Nurofen tablets. Kapoor joined Reckitt & Colman in 1987 and served in various roles. He became the chief executive officer of Reckitt Benckiser Group Plc in September 2011

Memorable Quote

"The year I was born, the literacy in my town was 1 in 6. So I had a 15 per cent chance of being educated, mathematically. And here I am. But I've not lost my earthiness. I am a son of the soil. This is exactly who I am; I would tell you how it is."

YOUNG INDIAN ENTREPRENEURS

BY : DR. PANKAJ AGARWAL
HOD, DEPT. OF CSE

The entrepreneur movement is spreading well beyond big cities and major universities in India, and is marked by a new seriousness and focus (ref. Book *Bhaag)*

Youngsters today are more assertive, plugged into the latest waves of online media, bold enough to test their ideas, and not worried about getting another job even if their startup ventures fail initially. The startup ecosystem in India is now amplified by a range of incubators, accelerators, investors, media resources, startup platforms, competitions, awards and even government grants. These include the National Entrepreneurship Network, Indus Entrepreneurs, Indian Angel Network, T Labs, Startup Village, Startup Centre, Tata First Dot, Bloomberg Pitch, Power of Ideas (IIM, DST) and YourStory.

Arpit Mohan and Abhishek Nayak started **GharPay Technological Services** in 2011 in Hyderabad, in the area of digital commerce. They met at BITS Pilani, and Abhishek's internship at Bloomberg in Hyderabad exposed him to the attitudes of Europeans, where people set their own personal goals rather than being caught up in the rat race. He and Arpit ploughed through 18 ideas before settling in on the e-commerce boom – cash on delivery (CoD) services. They offered CoD to clients such as RedBus, MeraEvents, Jet Airways and ClearTrip.com, and the company received investment from Sequoia in 2011. They later sold GharPay to Delhivery, and pivoted to create a new product called ClinkNow (predictive purchase analytics).
Prasad Gundecha and Akshat Oswal launched Tech Innovance in 2012, offering home and building automation solutions based on certification received for German product ranges. The two actually began by first selling *khakhra* in Kamla Nehru Park in Pune as part of a college activity called Out of the Box, where students had to make at least Rs. 300 per head every alternate Thursday via some business activity. They later latched onto the construction boom in India, and set up an Experience Centre for customers to understand automation solutions.

Vijith Padmanabhan started DoLoJo ("do, love, enjoy") in 2013 as a social networking application with products such as BlueBag (bookmarking with screen grabs) and ShoutCrow (sharing content along with video clipping features). He is an 'ideas man' brimming with ideas and plans in various stages of exploration and execution, and embraces 'strangeness' as well as meditation. Vijith began launching products when he was in the third year at Model Engineering College in Kochi, and incubated his company at Startup Village after a useful internship in digital branding at design firm Salt Mango Tree.
Aditya Gupta and Karan Kumar founded iGenero in 2008 in Hyderabad to offer digital marketing solutions. Aditya also runs another startup networking event called Social Samosa in Bangalore. After engineering, he was exposed to the world of the Internet while working for Azri Solutions in Hyderabad. He and his friends evaluated business options such as corporate gifting services and even bike riding gear, before settling on digital content. A serendipitous break was getting an order for designing the website for George Washington University to which Aditya had applied for grad school but deferred his admission. They faced some challenges on the recruitment front for some time (eg. dealing with age diversity) and also had conflicting advice on whether to grow organically or get outside investors.

Sahil Baghla and Ayush Varshney founded BlueGape Lifestyle in 2011 to secure fan merchandise IP and distribute the portfolio. They actually began by offering IIT entrance coaching classes when they were still students at IIT Kanpur, and then dabbled in hydroponics after a semester in the US. They then began printing and distributing celebrity posters on campus, and then other kinds of merchandise. Labs led them down the fan merchandise route, and their e-commerce clients now range from Krish and Indian Ocean to Parikrama and Anu-

CONTINUE.....

YOUNG INDIAN ENTREPRENEURS

Priyadeep Sinha founded Gyan Lab in 2011 to enhance school learning via activity kits. He was studying engineering at Manipal University and won a business plan competition along with batchmate Abhash. They also won an award to be selected by the local incubator, and evolved a business model which included a Lab Coach for school settings. They won other awards and cash grants as well (Dell Social Innovation Challenge, Power of Ideas), and are looking to expand to a dozen centres. Sarah D'Souza and Amit Vernekar founded BioSyl Technologies in 2012 in Hubli. They met as classmates at BVB College of Engineering and Technology, and became interested in creating chambers for the growth of anaerobic bacteria. Their idea received support from mentors, and they won awards at National Tech Fest, a Karnataka tech fest, and Tata First Dot.

Swati Bondia started the social enterprise Om Shanti Traders in Bangalore in 2011 to create ethnic handicrafts and also give employment to marginalised communities. Though she came from a business family (Marwaris) and had a natural business sense, she pursued an independent path without seed funding from her family. Swati was moved by the plight of a migrant family, but chose a sustainable business route to help them. Exposure at a trade fair and advice from mentor professors gave her more creative ideas, and her first break in corporate gifting was from The Leela Palace hotel.

Avi Bhattacharya launched Centre Stage Dance Company in 2012. He came from an artistic family, and branched out into dance as a hobby and profession when he came to Pune to study engineering. His passion for dance as a lifestyle and his dedication to professionalism and quality led to a string of jobs in local dance studios – but he struck out on his own with another dance colleague. Avi also won the Tata First Dot Contest, and is formally incorporating his studio.

Priyanka Amar Shah founded iKheti in 2012 to help set up and maintain sustainable urban farms. Her business plan for kitchen gardens in cities won a competition at her college, Welingkar Institute of Management in Mumbai. She also took part in the TV program The Pitch and even got endorsement by then President Prathiba Patil. Priyanka validated her ideas with industry experts and potential customers. Her startup now offers products as well as design and consulting services, and she plans to expand to corporate customers as well.

Annu Grover started Nurturing Green in 2010 in Delhi to sell plants as gifts and décor items. He studied in Noida and discovered the joy of plants as gifts when he went to Austria on a business program. Annu consulted for a firm helping European companies set up shop in India, and then returned to India to work in the area of conservation. He experimented with a branded potted plant gifting service before moving to the larger décor segment. He won the Power of Ideas competition, and a YouTube video helped attract funding from a Dubai firm. Now he has set up 26 retail outlets in four cities.

SANSKRIT

The computer language of Vedic age!

BY : HEMA KASHYAP
ASST. PROF.
DEPT. OF CSE

Before reading the article, just pronounce "Pitra". Now say "Patar"! After this say "father"! Ok, now say "Padar". Now, repeat all these words together-Pitra! Pater! Father! Padar!

Undoubtedly, you must have heard a common sound in all these words. These words appear similar to each other to a great extent. But, you will be surprised to know that these words belong to altogether different languages. "Pitra" is a word from the Sanskrit language. Pater, Father, Padar belongs to the Latin, English, and Persian respectively. It is all the more surprising that the meaning of these words that belong to different languages is the same- Father …

Now, a natural inquisitiveness must have kindled within you. Why such a similarity between different languages from different regions? Two possibilities could be there. Either it is a sheer coincidence or else the languages are not basically different at all, i.e. they are born out of each other! If we think of the first possibility to be correct, which indeed is difficult to fathom, it imposes a question mark on the wisdom of humankind. As such, the second possibility seems to be correct, but, if we think this alternative to be feasible, a yet another question arises- Which of these languages actually form the base? Which is the mother-language from which the family of other languages originated? You may say it should be the oldest; meaning, the most ancient. According to the linguists and historians, the most ancient language is "Sanskrit"! As such Sanskrit is the mother of all languages.

If you are not willing to accept this fact plainly, then you may steer your attention to an alternative perspective. Take for example that two identical baskets full of tasty fruits are kept in two different countries. Which country will you agree that the fruits originated from? - The one where the trees of those fruits exist, isn't it? Similarly, the words of any language are like the fruits. The language in which the trees of these fruits exist, meaning the root of the words belongs, the language should be taken as the basis from which all other languages originate. Sanskrit is such a language where one gets the root of the words.For example, in the word "Pitra", the meaning of the root "Paa" (*rakshane*) is ingrained. Other languages do not possess these features.

As such the conclusion is clear- that the Sanskrit words only travelled outside India and visited different countries. However, the linguists and inquisitive scholars of literature moulded those words according to their needs and understanding, and established their ownership on those words.

Consequently, only the sound of the Sanskrit words went to them; but, the aspect like "root" were quite profound, so, they could not catch it. That's why, in other languages, such (distortrd or moulded) words remained devoid of roots. As such it is crystal clesr that Sanskrit, the language of the Vedas, has taught the whole world to speak. It has provided the support to their conversational style. This language has taught conversational and written skills to the entire humankind…. And to the computer as well!!!

What? Vedic language Sanskrit and the Computer!

Yes, you heard it right!

On one hand, the Vedas of the ancient times and their language! And, on the other hand, these complicated programming languages of the computers of the 21st century! Is there any comparison?

Indeed there is! The comparison is a hundred percent valid! No doubt, Sanskrit is the most ancient

language; but, it is supremely advanced. Fine, how do you, being a programmer, engage in a conversation with your computer? In which language do you develop your computer program? There can be many options for you to select out of the different programming languages that have been created. For instance, FORTRAN, PASCAL, COBOL, C++,C, JAVA SCRIPT, PERL , JAVA, etc. these languages provide you with a (Systematic) Character Set, Command Statements, Operators, keywords, etc., with the help of which you can prepare your program code.

But, do you know these concepts of computer languages are the gift of Sanskrit to them? The essence of the words in these languages, the features, the well-defined logics, the systematic and logical approach- all these were gifted to the human intellect, first and foremost by Sanskrit. The underlying basis of Sanskrit comprise of great *Maheshwar Sutras*, Panini's *Ashtadhyayi* Grammer and the principles of *Mimansa*, which offer it the status of a scientific language. Undoubtedly, Sanskrit is a Computer Science of the ancient times. This is not the figment of imagination, but a fact. In the recent past, a book was published by Ved Bharti titled "Vedas and Computers". Its author Dr. R.V.S.S. has done a comparative study of the language of the Vedas and the computers. On the basis of his findings, some of the stunning facts are being presented here:

Computer Statements v/s Vedic Statements

You must be aware of the fact that the computer program is formulated by a number of the statements, which are written step by step. These statements are generated on the basis of the programming language selected by you, like C, C++, JAVA, etc and its related grammar. These are two types of statements:

1. Executable Statements
2. Non-Executable Statements

The first type of statements are those in which a command or order is issued. Such statements are understood by the processor and executed accordingly. In other words, the processor acts according to the command and tenders the correct result. Take for example the Assignment Statements like (Var 1= Var 2 + Var 3); Control Transfer Statements like (If-then, GOTO, DO, Continue, Return); I/O Statements like Read, Write, etc.

Non-Executable Statements are those in which there is no command but only information. With the help of these statements, you define the facts. An identity is provided. For Example: Program Title statements, REM Statements, Type Declaration Statements, etc.

Those who have the knowledge od any programming language, they know well about these statements, as how they are generated and where they are written. But, have you ever read the computer programs written by our ancestors? The Vedas are the compilation of the programs written by them. The statements of the Vedas can also be divided into two parts: "*Mantra Braahmanaatmakaha shabdaarashihi*" i.e. the "*Braahmana*" and the "*Mantra*". The *Braahmana* part contains the commands and instructions. The statements in Mantra section are not commands; they provide the information only. Meaning by, the *Braahmana* section contains the Executable Statements and the Mantra section carries the Non Executable statements. Putting it elaborately, in these two sections, the Vedic statements are in the following forms:

1. *Vidhi Vakya* (Command Statement): In these, direct commands are given. For example, "*Satyam Vada*"- Speak the truth. "*Dharmam Chara*"- Abide by the principles of Dharma. It can be clearly seen that these are executable statements.
2. *Mantra Vakya* (Informative Statements): These are the sentences from Vedas, in which no command, but information is provided. For example, "*Agnimeele purohitam*"- in this sentence, a pundit who is performing *yagya* is just reminded about "*agni samskara*". Such statements fall under the category of Non-Executable Statements.
3. *Naamdheya Vakya* (Name Defining statements): Through these the name of any Vedic action or fact are defined. For example, "*Udbhidhaa yajet pashukaamaha*"-in this statement, a mention is made about the action called "*Udbhita*" related to *Yagnas*. Apart from this statement, you will not find this name anywhere in the Vedas. That's why it is considered as Name Defining Statement. It is just like the Tile Statements or Name Declaration Statements (PROGRAM, FUNCTION, SUBROUTINE, etc) of the computer programs, in which we define the name of a program or sub-program. As such *Naamdheya* Statement is also a Non-Executable Statement.

   Similarly, there are many other sentences in the Vedas, which can be placed in the placed in the above –mentioned two categories.

   Likewise, in the present-day computer science, there are innumerable concepts like-keywords, Operators, Programs Sub-programs, Time-Sharing, Password, etc. Such concepts can be read in the ancient text books of computer science, i.e. the Vedas as well.

MARS ORBITER MISSION

BY: Vikas Singh
Asst. Prof.
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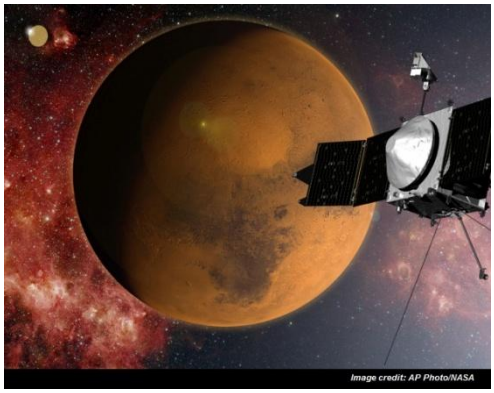
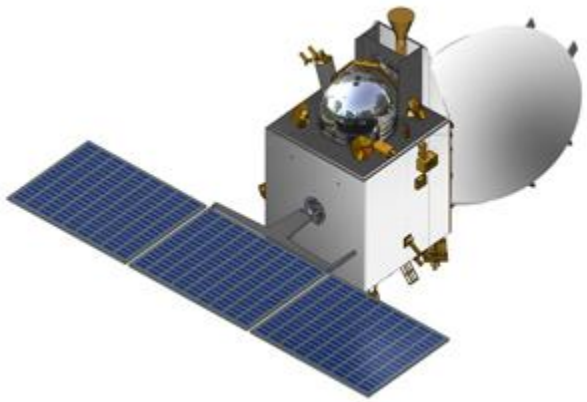


After a 10-month-long journey, India's first interplanetary spacecraft created history by its precision, cost effectiveness and swift planning. Over the next six months the five instruments will make several observations. Whatever the scientific results its payloads get, Mangalyaan in entering the Martian orbit in its maiden attempt has proved much about Isro's ingenuity and capability. While all space missions are executed with utmost precision, Isro's earlier missions allowed it to repeat a few operations in the next orbit but in the Mars mission they had to get everything right in the first and only instance or else the spacecraft would have gone to some undesired orbit.

There have been many firsts for Isro with the Mars Orbiter Mission: It's India's first deep space mission. If Chandrayaan was the last mission to catch the nation's fancy, then it's good to recall that it travelled merely 400,000 km; Mangalyaan has travelled 680 million km. India's most trusted and used rocket was designed to use a new propulsion system to travel so far. The first time again that any rocket launching low-earth orbit satellites has been tweaked to launch a satellite in to deep space. That's PSLV's versatility.

Mars Orbiter Mission is India's first interplanetary mission to planet Mars with an orbiter craft designed to orbit Mars in an elliptical orbit. The Mission is primarily technological mission considering the critical mission operations and stringent requirements on propulsion and other bus systems of spacecraft.



Mission Objectives

One of the main objectives of the first Indian mission to Mars is to develop the technologies required for design, planning, management and operations of an interplanetary mission. Following are the major objectives of the mission:

A. Technological Objectives:

- Design and realisation of a Mars orbiter with a capability to survive and perform Earth bound manoeuvres, cruise phase of 300 days, Mars orbit insertion / capture, and on-orbit phase around Mars.
- Deep space communication, navigation, mission planning and management.
- Incorporate autonomous features to handle contingency situations.

B. Scientific Objectives:

- Exploration of Mars surface features, morphology, mineralogy and Martian atmosphere by indigenous scientific instruments

Computer Engineers

Who are they and what do they do?

BY : Rishi Mohan Awasthi
B.Tech ,2nd yr –CS2

Most universities offer computer engineering as either a degree, sub-discipline of electrical engineering, or offer a dual degree in both electrical and computer engineering. Because computing has become so much a part society, it is hard to separate what an electrical engineer needs to know and what a computer engineer needs to know.

It is safe to say that computer engineering is a combination of elements of electrical engineering and computer science, which deals with the design and utilization of computers. Computer engineering seeks to match efficient digital devices with appropriate software to meet the scientific, technological, and administrative needs of business and industry in a global economy.

What A Computer Engineering Curriculum Should Provide?

A Computer Engineering curriculum should provide students with a foundation in basic science, mathematics, and the humanities. Written and oral communication skills should be emphasized and developed throughout the program. Also, team project work and an appreciation of the ethical and professional responsibilities of an engineer should be present in any computer engineering program.

Some of the more recent developments in computer engineering include digital and microcomputer applications, digital signal processing, image processing, telecommunications, computer architecture, electromagnetic compatibility and computer vision. These areas are emphasized along with digital system design, embedded systems design, operating systems, and other more conventional subjects in computer engineering. Extensive use of the computer as a tool for mathematical analysis, design, data analysis, and instrumentation is emphasized. The repetitive nature of the design cycle and the need for simultaneous documentation and development are emphasized through team project work.

Computer engineers specialize in areas like digital systems, operating systems, computer networks, software, etc. Professionals in the computer engineering field have at least an undergraduate degree; however, many professionals employed in the computing industry have advanced degrees. Graduates of computer engineering find employment in a variety of settings, such as universities, industry, and government organizations. Here is a very short list of research and vocational areas related to computer engineering. An expanded list can be found in Careers in Computing , a publication of the IEEE Computer Society.

Computer Design and Engineering — Design new computer circuits, microchips, and other electronic components.

Computer Architecture — Design new computer instruction sets and combine electronic or optical components to provide powerful but cost-effective computing.

Information Technology — Develop and manage information systems that support a business or organization.

Communications Systems Engineer – Design, integrate, and deploy digital and optical communication

Computer engineering has grown and matured into a dynamic major helping to propel the wave of technological growth in the world. Computer engineering programs provide students with a background that prepares them for careers as lifelong learners since it is imperative that computer engineers maintain their technical competence in a field that is developing and changing so rapidly.

The Rise of Indian Football

By: SANJAY BASNET
B.TECH .2ND YR -CS2

Things do look brighter if we seek change. Every country started off somewhere... we have the second largest population, a multitude of rich business men ready to invest, lots of talent in every corner and more than 50 million followers of football waiting for the opportunity to support their national team...So in the end, can we reach India to the level of teams like Brazil and Spain? In the words of Barack Obama "Yes, We Can!"

The British invented Cricket and the Indians ran with it, their rule bought cricket into the Indian Subcontinent and although the British were banished, they left cricket behind. Soon football dominated the majority of Europe, where as India is still head over heels for cricket, and rightfully so with it being sport that the national team is most successful at.

In order for India to reach the level of play in foreign countries with regards to football, there are three main factors that are missing, structure, professionalism and exposure. The only time India ever qualified for the World Cup, they were disqualified because they played barefoot.

Today, with cricketers earning in millions, reaching the World Cup finals, driving around in expensive car's and India touching the status of a country destined to rise to greatness, our football team still hasn't played a single game in the World Cup.

How can we expect a sport to gain popularity without promoting it even the slightest? Following the termination of contract with Zee Sports, the only chance of catching a match LIVE is a Kolkata channel called Mahua Bangla and is only available to those in West Bengal. Why is it that people from Mumbai or Goa are punished for a mistake of the All India Football Federation (AIFF)? Is it a crime to be of another state?

In 1983, Kapil Dev led India to win the World Cup. Sachin Tendulkar was not older than 12 back then and was inspired to take up cricket, and undoubtedly many other youngsters will be influenced by him, which will in turn help develop the next generation of super stars. Sikkim has found a role model in Bhaichung Bhutia and now you see many more of the youth aspiring to be footballers, maybe what India needs is that one Kapil Dev to create a path for youngsters who might someday be legends for the Indian Football team

In order to gain quality players in the National teams, clubs have to provide a platform for youngsters to train and reach a level of excellence. academies, proper grounds, planned diets, exposure to internationals standards of play and regular scouting for new talent is a must! It is believed that around 53 million Indians have watched the football World Cup 2014, which proves that football is no stranger to the country and the people are not "cricket obsessed"

When the National Football League started, people started gaining an interest in the sport.

As time passed by, the AIFF failed to publicize and capitalize on the success the sport had received, led football back where it started off.

Football in India has to be marketable. Teams like Manchester United and Arsenal are doing much better in India in terms of business in compared to the national team. There is more support seen for Brazil than there is for India. In order to gain sponsorship, Indian football needs to be promoted as a marketable product.

One such step is the Indian Super League (ISL) which is the footballing counterpart of IPL.

Approx 8-10 teams will play and it is believed ISL will provide the much needed exposure and marketing for football in India. Sachin Tendulkar, Sourav Ganguly, Ranbir Kapoor, John Abraham are some big names to own teams in ISL. It is one small step for football in India but big enough to be able to make massive impact. If football is to grow in India the opportune time has come.

What could be the reason for that?

First we blame the media. Then we blame the government. Following which we pin the blame on cricket... It is another episode never ending blame session that is ever so popular in India. One step forward in the blame game, one step backward for football. We can spend days talking about how over hyped cricket is, how the media is doing nothing and how Indian football is never going to gain popularity, but when is anyone going to stand up and make a difference?

Blaming cricket for lack of broadcasting of football matches isn't getting us anywhere. Cricket is played in many countries in Europe as well, but it is football that is more popular. There are no issues about a poorly run leagues, lack of broadcasting or biasness towards one sport only

WORLD FASTEST CARS

BY : Sauhard Nandan Chaurasia
B.TECH 2ND YR ,CS2

Hennessey Venom GT: **270 mph** (*435 km/h*)

Hennessey Venom GT: 270 mph (*435 km/h*), 0-60 mph in 2.5 seconds, has a 7.0 liter LS7 Turbocharged V8 Twin Turbo V8 Engine producing 1244 hp, with a price tag of $1,000,000 and up. The Venom GT is the fastest car in the world when tested again on February 14th, 2014 at NASA

Bugatti Veyron Super Sport: **268 mph** (*431 km/h*),

Bugatti Veyron Super Sport: **268 mph** (*431 km/h*), 0-60 in 2.4 secs. Aluminum, Narrow Angle 8 Liter W16 Engine with 1200 hp, base price is $2,400,000. After being the fastest car in the world for over 3 years from July 10, 2010, it is now in 2nd place as of February 14, 2014. In the past, the Bugatti Veyron lost the title to SSC Ultimate Aero on March 2007total area. Neighboring countries include Indonesia, East Timor and Papua New Guinea to the north; the Solomon Islands and Vanuatu to the north-east; and New Zealand to the south-east.

. **KoenigseggAgera R**: 260 mph (*418 km/h*), 0-60 mph in 2.9 secs. 5.0-liter V8 Engine with twin turbo's, housing 1099 hp. Base price is $1,600,000

PaganiHuayra: 230 mph (*370 km/h*), 0-60 in 3.0 secs. Twin TurboCharged 6.0 liter V12 Engine from Mercedes AMG. It pumps out 720 hP

SSC Ultimate Aero: 257 mph (*413 km/h*), 0-60 in 2.7 secs. Twin-Turbo V8 Engine with 1183 hp, base price is $654,400. Tested in March 2007 by Guinness World Records

Zenvo ST1: 233 mph (*374 km/h*), 0-60 in 2.9 secs. Twin-Charged 7.0 liter V8 Engine forging 1,104 hp. Base price: $1,225,000.

INTERESTING FACTS ABOUT COMPUTERS

By : Pawan Srivastva
B.Tech, 3rd yr CS2

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Only 8% of the world's currency is physical money, the rest only exists on computers. ·

There was a computer worm that would gain access to Windows XP systems, download a patch from Microsoft to close the vulnerability that it used to infect the system, attempt to delete the infamous Blaster worm (if present) from the system, then delete itself. ·

The worst breach of U.S. military computers in history happened when someone picked up a memory stick (infected by a foreign intelligence agency) they found in the parking lot and plugged it into their computer, which was attached to United States Central Command. ·

Investigators missed incriminating Google searches done on Casey Anthony's computer – including "fool-proof suffication because they checked her Internet Explorer history, but ignored Firefox. ·

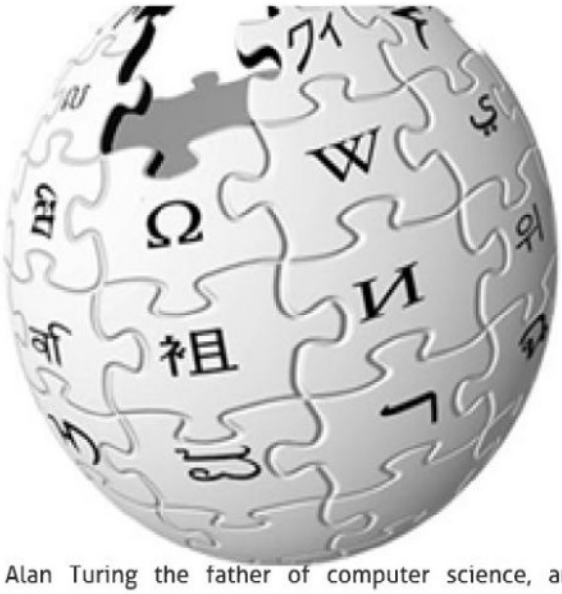
5. In 1978, Apple Corps (owned by The Beatles) sued Apple Computer for trademark infringement. The case settled for $80,000 along with the condition that Apple Computer should not enter the music business, · and Apple Corps agreed not to enter the computer business. ·

The Motion Picture Academy refused to nominate Tron (1982) for A special-effects award because, according to director Steven Lisberger, "The Academy thought we cheated by using computers." ·

Mary Kenneth Keller, the first woman to earn a Ph.D. in Computer Science in the United States also earned a Master's degree in Mathematics and Physics, helped develop computer programming languages and she was a Catholic nun. · John Lasseter (CEO of Pixar) was fired from Disney for promoting computer animation. ·

Illegal prime numbers exist. An illegal prime is a prime number that represents information which is forbidden to possess or distribute. For example, when interpreted in a particular way, a certain prime describes a computer program that bypasses the digital rights management scheme used on DVDs. ·

The new Texas Instrument calculators have ABC keyboards because if they had QWERTY keyboards, they would be considered computers and wouldn't be allowed for standardized test taking 40-55% of all Wikipedia vandalism is caught by a single computer program with 90% accuracy. · A wow player "Bradster" has 36 wow accounts and conducts raids with himself on 11 computers ·



· Alan Turing the father of computer science, artificial intelligence and who helped break German WW2 cyphers, committed suicide after being forced to undergo hormonal treatment for homosexuality and barred from continuing his cryptographic work

Big banks don't process checks and debit card charges to your account in the order they're received, but instead use a computer program that selects the biggest amounts first and charges them against your account; emptying your account faster and resulting in more overdraft fees (profit). · Tandy TRS-80 Model I computer radiated so much interference that many games were designed so that an AM radio next to the computer could be used to provide sounds. ·

A 15 year old hacked NASA computers and caused a 21-day shutdown of their computers. He hacked Pentagon weapons computer too... ·

INFRASTRUCTURE AUTOMATION WITH CHEF

BY : MS. ANN MARY
ASST. PROF.
DEPT. OF CSE

Systems administrators have always tried to automate repetitive tasks. Some use BASH and Perl with SSH to loop through a list of servers one at a time. This has some limitations and doesn't scale particularly well, especially in a medium to large datacenter or cloud deployment. So what is a forward-thinking system administrator to do? Let's take a look at a tool called Chef. Chef is a configuration management tool which follows the concept of infrastructure as code and could be used for the automation of creating infrastructure on cloud as well as on-premise data centres.

What is infrastructure as code?

With the arrival of tools like CFengine, Puppet, and Chef, the concept of Infrastructure as Code was born. These tools enable developers and sysadmins to abstract their problems around maintaining modular, automatable infrastructure, and being able to define them using a high-level language. Once teams started using these tools and techniques, building and maintaining their server environments began to closely resemble the way that software developers build and maintain application source code.

All of the testability, repeatability, and transparency of a modern software development process suddenly became available for people who were building infrastructure. The lofty goal for many of these cutting edge organizations was to be able to completely rebuild a business' software systems with nothing more than physical server resources, a complete backup of their databases, and source code. Today, that's how many modern successful tech businesses operate.

What is Chef?

Chef is one of a new breed of open-source "infrastructure as code" tools to manage infrastructures of any size. It provides administrators with the capability to define "cookbooks" that can be applied repeatedly and consistently to server and application configurations. When using Chef as a client-server application, either with a local Chef server or the Hosted Chef, there are a few moving parts to keep track of.

Unlike some other "infrastructure as code" tools, Chef was designed from the beginning with systems integration in mind. This allows Chef to gather the information a server needs to configure itself. For instance, if you were to configure Apache httpd as a proxy for a farm of Tomcat instances, your configuration could ask the Chef server for a list of all the installations of Tomcat, their hostnames, and port number.

Common Terminology

Node: A managed machine. When the Chef client runs, it executes the configuration for a node.

Client: An authorized user of the Chef API. In most cases, every machine you manage will be represented by: a) a client for logging into the API and b) a node configuration to apply. Administrators and the web interface are also clients.

Cookbook: A collection of attributes, recipes, custom resources, and definitions to configure a certain application or service. For instance you will find shared cookbooks available on the web for NTP, Apache httpd, MySQL, nginx, and other common services.

Recipe: A list of resources that should be applied to a node. Recipes are written in normal Ruby extended by the Chef resource domain-specific language. This gives you the power of anything you can do in Ruby (conditionals, using gems, etc.) while not having to be verbose in managing the resources that make up your configuration.

For more information on infrastructure automation with chef, visit www.getchef.com


CURRENT NEWS

Current News

By :Anuj Srivastava
B.Tech ,3rd yr CS1

THE WORLD

India, Bahrain convey commitment to improve bilateral trade, investment

India and Bahrain trade and commerce ties are on an upsurge. India and Bahrain trade and commerce has amassed momentum over the years and is assured to increase more with stress on partnerships in important sectors. Now the stress is on shifting from a characteristic buyer-seller relation to partners in.

First Digital Currency of the World from Bank of Ecuador

On 29th August 2014 the central bank of Ecuador has announced to released the world first digital currency. The new digital currency was approved in July 2014 but a part from that Ecuador has US dollar as a national currency after the world economy crisis in the year 2000.But yes this new first digital currency is not like Bit-coin.

MoUs signed by India and China

3 MoUs signed by India and China. These MoUs were signed during the official visit of President of China XI JINPING for India.

Pankaj Advani took retirement from professional snooker

Pankaj Advani on 5 September 2014 announced to retire from the professional snooker tour.

TECHNOLOGY

Scientists Created New Type of Human Stem cell

Scientists have created a new type of human stem cell in the lab which they believe will be better at making replacement organs than existing stem cells.

"It has become appallingly obvious that our technology has exceeded our humanity"
-Albert Einstein

ISRO's launch of PSLV-C23 : A milestone for India

India on 30 June 2014 successfully placed five foreign satellites from four countries in the intended orbits on board the Polar Satellite Launch Vehicle (PSLV C-23).

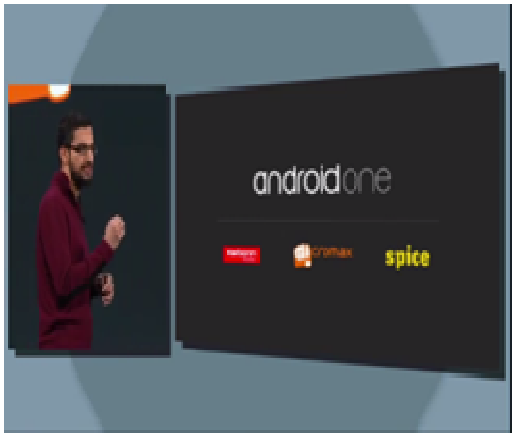
Apple unveils bigger iPhone 6, 6 Plus & Apple Watch

Apple did not let down its admirers despite failing to surprise them on Tuesday. In line with the numerous leaks and rumors ahead of its launch
event, the iconic Cupertino, California company unveiled two new thinner, bigger and faster smart phones
— iPhone 6 and iPhone 6 Plus — and a new smart watch simply called the Apple Watch.

ICICI Bank presents 'Cardless Cash Withdrawal' –

ICICI Bank has initiated 'Cardless Cash Withdrawal', a facility that permits its customers to transfer money from their account to anybody in India with a mobile number. The recipient can withdraw money anytime without using a debit card from ATMs of ICICI Bank all over India. The receiver can do this even without having a bank account of any bank.

"While money can't buy happiness, it certainly lets you choose your own form of misery"
-Groucho Marx



Google launches Android One in three new smartphones in India.

Google has launched the first family of Android One phones in India, saying the move is part of a "larger initiative to bring high-quality smartphones to as many people as possible."

Persons in News

Indian presence at NASA's Cubes in Space (CIS) Program

Indian-origin student Prerna Pai is recently in the news for having two of her experiments approved for launch into space under NASA's Cubes in Space (CIS) .

"Always dream and shoot higher than you know you can do. Do not bother just to be better than your contemporaries or predecessors. Try to be better than yourself."
— William Faulkner

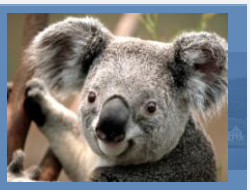
Vishal Sikka appointed as the new CEO of Infosys

Faltering Infosys has found a ray of hope in its next *CEO & MD* - Vishal Sikka. He will be the first non-founder CEO of nation's second-biggest IT outsourcer after TCS. The beleagured company, marred by high-profile exit recently, is trying to revive its fortune through this overhaul

2014 Forbes' list of 100 most

SBI Chairperson Arundhati Bhattacharya (36th rank globally) is the *most powerful woman in India* as per the latest Forbes' list of 100 most powerful women .


LATEST TECHNOLOGY



ANGULARJS

BY : Amit Kr. Gautam
Asst. Prof. ,Dept of CSE

AngularJS is a structural framework for dynamic web apps. It lets you use HTML as your template language and lets you extend HTML's syntax to express your application's components clearly and succinctly. Angular's data binding and dependency injection eliminate much of the code you currently have to write. And it all happens within the browser, making it an ideal partner with any server technology.

Angular is what HTML would have been had it been designed for applications. HTML is a great declarative language for static documents. It does not contain much in the way of creating applications, and as a result building web applications is an exercise in *what do I have to do to trick the browser into doing what I want?*

The impedance mismatch between dynamic applications and static documents is often solved with:
a library - a collection of functions which are useful when writing web apps. Your code is in charge and it calls into the library when it sees fit. E.g., jQuery.
frameworks - a particular implementation of a web application, where your code fills in the details. The framework is in charge and it calls into your code when it needs something app specific.

AngularJS is a **JavaScript framework**. It can be added to an HTML page with a <script> tag.
AngularJS extends HTML attributes with **Directives**, and binds data to HTML with **Expressions**.
AngularJS extends HTML with **ng-directives**.

The **ng-app** directive defines an AngularJS application.
The **ng-model** directive binds the value of HTML controls (input, select, textarea) to application data.
The **ng-bind** directive binds application data to the HTML view.

WHY ANGULER JS.

HTML is great for declaring static documents, but it falters when we try to use it for declaring dynamic views in web-applications.
AngularJS lets you extend HTML vocabulary for your application.
The resulting environment is extraordinarily expressive, readable, and quick to develop

Angular JS takes another approach. It attempts to minimize the impedance mismatch between document centric HTML and what an application needs by creating new HTML constructs. Angular teaches the browser new syntax through a construct we call directives. Examples include:

- Data binding, as in {{}}.
- DOM control structures for repeating/hiding DOM fragments.
- Support for forms and form validation.
- Attaching code-behind to DOM elements.
- Grouping of HTML into reusable components.

EXAMPLE

```
<!DOCTYPE html>
<html>
<body>
<div ng-app="">
  <p>Name: <input type="text" ng-model="name"></p>
  <p ng-bind="name"></p>
</div>
<script src="http://ajax.googleapis.com/ajax/libs/angularjs/1.2.15/angular.min.js"></script>
</body>
</html>
```

Example explained:
AngularJS starts automatically when the web page has loaded.
The **ng-app** directive tells AngularJS that the element is the "owner" of an AngularJS **application**.
The **ng-model** directive binds the value of the input field to the application variable **name**.
The **ng-bind** directive binds the **innerHTML** of the <p> element to the application variable **name**.

GESTURE RECOGNITION

BY : SHUBHAM DIXIT
B.TECH 3RD YR, CS2

"Have you seen the remote?" "I left it on the table after watching my matinee show". "It is not here, I will miss the news again because of you!!!"

In the near future, such heated discussions over remote control won't disturb the harmony of the house. Not because they will place it correctly but because soon remote controls will be the objects of the past. Technology has finally reached that dimension when our hands will take over the job and replace them by directly communicating with the computer or television. For instance, in order to delete a folder or file from the computer, place your palm on it, and throw it like a paper in a dustbin.

Even while using the microwave oven to bake a cake, waving our hands in the air like a magician would serve as a command for the oven.

While some of us might be thinking of it being a futuristic vision, some of us have already experienced it through what we call "**Gesture Recognition Technology**"

Since the time that the computer revolution started, human computer interaction has always been attempted to improve. Computers have now become an integral part of our lives and hence their usage should be as trouble-free as talking to someone is. Earlier the way humans interacted with this smart machine was either through keyboard or a mouse. But now attempts are being made to make the man-machine interaction as natural as possible. Fulfilling this requirement is the popular touch screen technology which is soon expected to be replaced by the **gesture recognition technology**.

WHAT IS GESTURE

As per Oxford Concise Dictionary 1995, gesture is defined as "a movement of a limb or the body as an expression of thought or feeling". Similarly, Random House de?ned "gesture" as "the movement of the body, head, arms, hands, or face that expresses an idea, opinion, emotion, etc."

Human gestures are undoubtedly natural. They may often prove more efficient and powerful as compared to various other modes of interaction. Tracking a head/hand or a body position or configuration may be quite valuable for controlling objects/systems or for feeding input parameters to the system. Gestures may also be used for expressing yourself. As an example, nodding may serve to communicate your consent or agreement, raising a finger may be a sign of your wish to interrupt, saying "huh" may indicate "I'm with you, continue".

Gesture recognition involves tracking of a human position, orientation or movement and finally interpretation of the same so as to recognize semantically consequential gestures.

Gestures and gesture recognition are terms increasingly encountered in discussions of human-computer interaction.

In fact every physical action involves a gesture of some sort in order to be articulated. Gestures are communicative, meaningful body motions – i.e., physical movements of the fingers, hands, arms, head, face, or body with the objective to convey information or interact with the environment.

Cadoz described three functional roles of human gesture:

- Semiotic – to communicate meaningful information.
- Ergotic – to manipulate the environment.
- Epistemic – to discover the environment through tactile experience.

Gestures are used to convey information in variety of ways. An emotion of sadness can be conveyed through facial expression, a lowered head position, drooped shoulders, and lethargic movement. Similarly, a gesture to indicate "Stop!" can be communicated with the help of a raised hand with the palm facing forward, or an exaggerated waving of both hands above the head. Since there exists a many-to-one mapping from concept to gesture, gestures may often be ambiguous; at the same time, there also exists many-to-one mapping from gesture to concept and hence gestures are not completely specified. As speech and handwriting vary from one individual to other, gestures are also subjective. They vary among individuals and they vary from instance to instance for a particular individual.

Though gestural communication is rich, it is equally complex. Researchers have differentiated them in different ways. Kendon described a "gesture continuum," defining five different kinds of gestures:

- **Gesticulation**

Spontaneous movements of the hands and arms that are accompanied by speech.

- **Language-like gestures**

Gesticulation integrated into a speech, replacing a particular spoken word or phrase.

- **Pantomimes**

Gestures that depict objects or actions, with or without accompanying speech.

- **Emblems**

Gestures like "V for victory", "thumbs up" and assorted rude gestures.

- **Sign languages**

Well defined Linguistic systems such as American Sign Language. Explained below are alphabets "A", "C" and "F".

Spontaneous gestures (gesticulation in Kendon's Continuum) make up some 90% of human gestures. People make use of gestures even while talking on telephone, blind people commonly gestures while talking. Across cultures, speech-associated gesture is natural and common. Despite this, emblematic gestures and sign languages, although perhaps less spontaneous and natural, carry more clear semantic meaning and may be more appropriate for the kinds of command-and-control interaction.

WEBOS

BY: SARVANAND PANDEY
B.TECH 3RD YR , CS2

Web Operating System (WebOS) is an internet service through which a user can access his computer data remotely anywhere on any computer and in any part of earth were internet is available. It has been termed as **"Web Operating System" because they are present on the web and not on the computer of the user, all the data is being stored on the servers of the Web OS provider. Recently there was big roar on internet about the word "iCloud". It was an introduction of one more operating system in the category of web operating systems.**

Web Operating systems (webOS) was introduced as a thought that one might be able to play with application, store data, and share it on the internet from anywhere in the world. So does a web OS do. Today web OS are capable of storing large amount of user data as large as 50 GB providing a very simplified and user friendly interface. One can share files, listen to music, read news and can do many other stuff depending upon the diversity and richness of the web OS used by the user. In one line, "We have internet on computer. So, web OS is computer on the internet".

Myths about WebOS

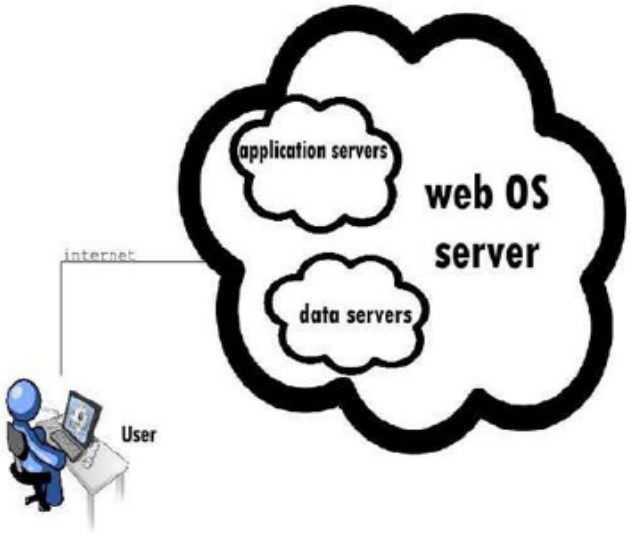
As the entropy of earth is increasing day by day, so is with the confusion in technology. Here are some of the many confusions or misunderstanding in the word "web OS". One of the basic myths is- "Are OS and Web OS are same thing?" The answer is "NO", not at all. Operating systems were built to communicate between the application and the hardware stuff of the computer. It deals with the internal operations running inside the computer. It includes scheduling of tasks, multi-tasking, utilization of resources etc. But on the other hand, *WebOS* are the operating systems that are composed of rich user interface which tries to mimic appearance of an operating system.

Another myth related to web OS is its confusion with another word "webOS". The webOS is actually an operating system developed under Linux for palm mobile devices.

How Do Web OS Works?

Before going to servers and cloud computing details let us first start locally. Consider the case of computers we have. The computer consists of many applications to work with such as one can use calculator to calculate, calendar to be scheduled, clock, games, and many other applications. Apart from these apps we also have diverse data like movies, memories, music, and files etc which we store in computer hard disk. We communicate with the computer through the user interface which is right now before your eyes (if you are viewing this page on a computer). If we want to share any data, internet is engaged. Sharing can be done through many websites available on the web. So this is how a local computer with a normal user works.

Now consider yourself as a computer user right now working at office. Suddenly your boss calls you to show some random file to him (sometimes they like people feeling inconvenient). But you forgot to bring it. The file is in the hard disk of your home PC and it could not be teleport from there to your office computer in air. This is the situation when most brain thinks if there could be any method by which they could access their local content anywhere. This problem was resolved by the programmers by introducing the concept of "Web OS".



WebOS are the dynamic computers. The applications, hard disk, operating systems are all present at the servers from where they are operated. The web OS service provider has different spaces for application access and database. The user is provided with a graphical user interface which feels like the one at your PC. This operating system consists of application section like calendar, clock, calculator, document editors etc then there is a section for data storage where user can store data, and there are many other sections depending upon the web OS. Whatever content user wants to store is stored at the hard disk at servers. As the terminology itself says, the web OS make use of the web to connect and upload files to the client server.

WEARABLE CIRCUITS

BY : SHUBHAM KR. SINHA
B.TECH 3RD YR CS2

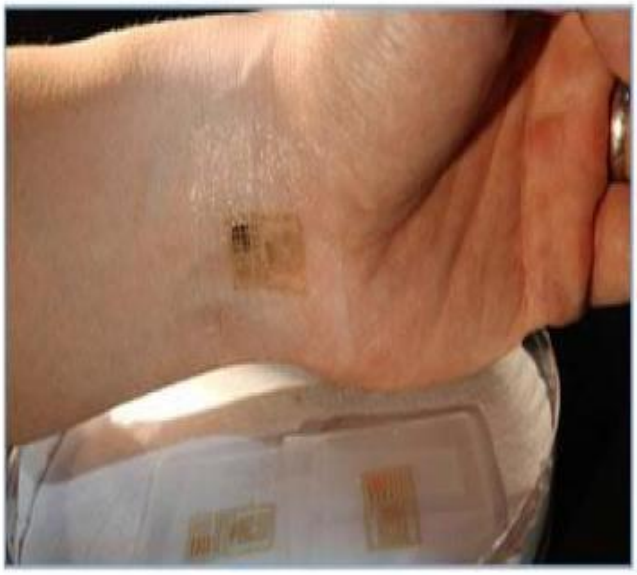
New Products that use Flex PCBs

Flexible printed circuit boards are at the forefront of the new wave of electronics found in healthcare, military, and consumer markets. Researchers are continuing to push the limits of possibilities for flexible PCBs, expecting the industry to grow five-fold in the next 10 years.

New materials, such as polyimide, allow a thinner, lighter product with the ability to move more freely. Conductive ink printing allows the elimination of connectors and cables, improving connectivity and assembly costs. The traditional process for manufacturing PCBs requires as many as 6 steps. New knowledge has shortened the process of manufacturing flexible PCBs to as little as 3 steps.

Smart Skin

The common doctor visit consists of signing in, waiting, visiting with a nurse and waiting some more before finally talking with a doctor. Throughout each step data about the patient is gathered and processed. The process of finding pertinent data can be simplified by applying a new adhesive patch on to the surface of a patient's skin called "smart skin."Through the "smart skin" patch, information is relayed through transmitters or antennas. Details such as heart rate, temperature, glucose levels, ECG, and EKG readouts will be available. Cables, tape, leads, and bulky equipment are eliminated! The patch is thin and lightweight, making it nearly undetectable. It can be adhered using water, similar to temporary tattoos. The material is designed to be ultra-flexible and move with the person's skin.



Glucose Monitoring Contact Lens

The pains of monitoring a diabetic's glucose levels can be cumbersome. A needle prick on the fingertip allows a small amount of blood to be dispensed for testing. The blood needs to be placed one test strip which enters a glucometer machine, with this routine needing to be repeated as often as eight times a day. Flexible PCBs are on the verge of helping to create a contact lens that monitors glucose levels, eliminating painful finger pricks, hazardous medical supplies (such as testing strips and needles) and manual result tracking.

The contact lens is equipped with a glucose sensor. A flexible PCB is placed on the lens with components that allow wireless transmission. The information will be streamed or transmitted to an outside location for interpretation and tracking. The use of flexible PCBs allows a very small and thin circuit that is undetectable. Previous PCBs would be too thick, stiff, and bulky for anything even close to this seamless application.

Consumer Products

Wearable consumer devices like smart phones and data capturing bracelets are being released to the public at an increasing rate. Flexible PCBs will be utilized in Smart technology to allow a lightweight, thin option which can be wornas opposed to a bulky item that has to be carried. Some of the items are even powered using solar cells as opposed to battery power.

Consumers will not be the only ones to wear flexible PCB products. Actual materials will be wearing labels. The labels will benefit consumers using sensors and antennas. Radiation tags can be placed on products to monitor levels. Pharmacies can use labels to read and track temperatures on drugs that need temperature control for stability. Foods can be fitted with labels that test for contaminates.

Power Sources

Power sources will need to adapt in order to keep flexible PCBs a viable option. The future holds the possibility of stretchable power sources. Most likely, new technology will apply carbon nano tube microfilm, polyurethane membranes and organic electrolytes. Another possibility is a bendable Li-ion battery. This would use cobalt oxide as cathode material and lithium for anode material.

The Future

Flexible PCBs are expanding the world of possibilities. Healthcare is considering Smart Surgical instruments.

Biosensors, similar to the Smart Skin, will relay data to remote locations. Patients with neuromuscular disorders affecting their communication will be able to communicate and interface with a computer. Flexible PCBs will continue to improve access, delivery, comfort and convenience to health care patients.


DEPARTMENTAL EVENTS

DEPARTMENTAL EVENTS

INDUSTRIAL VISIT

Department of Computer Science and Engineering organized an Industrial Visit on 27th August and 5th September, 2014 for B.Tech 3rd year students to **Apex TG India Pvt. Ltd., Noida and MCN Solutions, Noida**, a step towards bridging the gap between Industry and Academia. Visiting a company gives students a practical perspective on the world of work; it gives them exposure to current work practices as opposed to possibly theoretical knowledge being taught at college.

The students were guided in the following ways:

1. Seminar was conducted on the relevant ongoing projects at their organization, the technical processes involved, and current practices/standards followed, involved challenges and other related technical inputs.

2. Students visited various sections of the organizations that were directly or indirectly involved in the development of the end product.

3. Motivational lecture was delivered to make them aware of the involved challenges & expected requirements from an employee at entry level.

Events

- Industrial visits provide context and realism to academic programmes and can help revitalise students' interest, as well as linking you with new networks.
- The industrial visit is planned to give the students a practical exposure to the current working of Industries and to relate the same to what they study

47TH ENGINEER'S DAY CELEBRATION—ENGINEERING WORLD CLASS

Department of Computer Science and Engineering celebrated 47th Engineer's day (15/09/2014) in collaboration with "**The Institution of Engineers (India)"** at C-Block Auditorium, IMSEC, Ghaziabad. This occasion was graced by the presence of the presence of the Chief Guest Er. V.K. Agnihotri, Ex. Member (Engg.) Railway

There is nothing i believe is more strongly than getting young people interested in science and engineering, for a better tomorrow for all humankind. – Bill Nye

INNOVATION : THE BYTE INAUGURAL

On the occasion of ***Teacher's Day, Students of B.Tech 3rd year from Department of Computer Science and Technology*** took an initiative to inaugurate an **Online College Magazine** ***"THE BYTE"*** wherein the college students and faculty members can post and read various articles, thus promoting literary insight. The magazine will be published every month with its first edition on 5th September, 2014. The magazine will be maintained in a blog of its own, whose link will be provided in the college portal.

Some interesting articles of Volume 1 included:

- *ROBOT History And Definition*
- *Mozilla's Firefox OS v/s Android, IOS And Mobile Apps*
- *SOCIAL MEDIA*
- *E-LEARNING*
- *HURDLES OF INTERVIEW "ENGLISH & ATTITUDE"*
- *Cloud computing*

I think you have to have a real point of view that's your own. You have to tell it your way. And, I think that it's a mistake to shoot for a specific ***magazine****'s point of view because it's never going to be as good. You have to shoot for yourself and photograph the way you believe it." - Mary Ellen Mark*

TEACHERS DAY CELEBRATION

"Those who educate children well are more to be honored than they who produce them; for these only gave them life, those the art of living well."
— *Aristotle*

STUDENTS ACHIVEMENT

Shikhar Gupta, PiyushAgarwal and SagarTomar, student of B.Tech 3rd year, Department of Computer Science and Technology were invited by the Google India Pvt. Ltd. to attend the Conference on Search Day and Ad's day on 17.9.2014. The conference was regarding the inventions by Google and their latest technologies. The Conference was meant for webmasters and students gained a lot to meet Googler's and share experience.


Q&A

How to Hack Windows Password without password reset disk

By: SHASHWAT SHUKLA
BTECH 3RD YR CS2

There are various situations that you need to reset your windows password like you might have refreshed your PC but windows didn't recognize your account or someone changes your account settings

Before getting into business you need to have following softwares and packages:

1. Ubuntu (or any other linux iso)
2. Universal usb installer
3. Pen drive of at least 1GB
4. A windows of linux based another PC

Step1.**Now you have to make your pen drive bootable.** Just open universal usb installer and and select your linux distro which you have in requirement 1. And select pendrive letter and make sure you check on format button. Click on next.

Step2. Boot Your pendrive on the Computer that you want to hack in: Just start a live session and open up the terminal by using ctrl+alt+t and type the following command in the window.

sudo nautilus (hit enter)

This will open up the window (file manager named nautilus) //If you are using any other linux distro just use the name of the file manager you got on the distro

Step3. Getting inside windows root directory: Just navigate to the windows root folder (called c: on windows but it will not labeled as the same on linux) Go to windows>system32 and copy cmd.exe to linux filesystem (say Desktop) and rename it to utilman.exe . Now once again navigate to the same windows/system32 folder and rename the file utilman.exe to utilman.exe.bak . Now just paste the file you have already renamed to utilman.exe in the same directory (i.e. Windows/system32)

Step4: Perform the hack: Restart ubuntu and remove the pendrive . Now open up the windows and click on navigator button on the same login window. This time navigator won't open. But instead command prompt will appear.

Now type following command

net user username newpassword

Where username is the name of user you want to hack in and newpassword is the password which you want to put in.

That's it you have successfully hacked in the windows machine using 4 simple steps.

Please feel free to comment on our blogger if you got stuck in any step.

HOW TO PROTECT YOUR CLOUD ACCOUNTS

By : Rohit Chaudhary
B.Tech ,3rd yr cs2

Today we all have cloud accounts. Our data and information is stored on the servers of different websites. Is this safe to store some private data like bank account numbers, PIN numbers of ATM cards, and many others? Let's have a look.

Well,all online services use encryption to protect digital content. These algorithms are very hard to be cracked.In fact, hackers are more likely to breach online security because of our own carelessness.
The main reason is that mostly people use the same passwords for all their accounts. This means if any unauthorized person get into one of accounts, then he will soon have access to all other accounts.So, first step is to create strong passwords and different password for each of the account.

Creating a strong Password

The longer the better is the password. Avoid names, birth dates, pets, phone numbers, favourite film stars,sports person,etc.
Include upper and lower case alphabets, numerals, as well as special characters like @,#,$,%,etc.
Use phrases with words along with special characters and numerals.Use words from two different languages.This will make it easier to remember and harder to guess for any other person.
Example- *Rasgulla#is&sweet*

How to remember all your Passwords

Use a dedicated password manager-program that saves all your passwords in encrypted form so that no one, except you, can access them.You will need to remember one master password to access all your passwords.

Two step authentication

On many online services including Dropbox, Facebook, icloud,Google,Microsoft OneDrive and twitter, you can activate two-step authentication(under password and security settings in your account). With two-step, when you type your password, you will be asked to enter a one-time code that is either sent to your registered e-mail ID or phone number. The unauthorized person will not be able to login in your account. The second benefit is that you are automatically notified on your device or e-mail whenever a break-in attempt has been made on your account, you can change your password immediately.

SOME CLOUD STORAGES WITH SOLID ENCRYPTION

- **MEGA**

Mega is a storage and file-hosting service that offers 50GB of free online space and the abilityto encrypt data before uploading it to its servers. This means that even the cloud storage provider can not view your data. Only the user who has the decryption key, can access and view the uploaded content.

- **TRESORIT**

Tresorit provides end-to-end encryption and backup of data stored on your computer.First you will have to install its client software on your PC/Mac and create a free account.
The service provides you with 5 GB of storage and the ability to upload encrypted files from your computer to its servers.

You can choose any folder you want to encrypt and sync-you have to drag-and-drop the folder into the Tresoritdashboard. These encrypted folders or “Tresors” can be shared securely with others via e-mail.
The recipients also have to register with the service to view the folder’s content.

CONCLUSION

To use internet and cloud accounts efficiently, do not share your passwords with any person.
Choose strong passwords and different passwords for different account.

Aptitude Qns

BY : TUSHINA BEDWAL
ASST. PROF. ,
DEPT. OF CSE

1. One Rectangular plate with length 8 inches breadth 11 inches and 2 inches thickness is there. What is the length of the circular rod with diameter 8 inches and equal to volume of rectangular plate ?

2. What is the Number of zeros at the end of the product of the numbers from 1 to 100.

3. In some game 139 members have participated every time one fellow will get out. What is the number of matches to choose the champion to be held?

4. One fast typist type some matter in 2hr and another slow typist type the same matter in 3hr. If both do combine in how much time they will finish. (S)

5. In 8*8 chess board what is the total number of squares.

6. Falling height is proportional to square of the time. One object falls 64cm in 2sec than in 6sec from how much height the object will fall.

7. Gavaskar average in first 50 innings was 50. After the 51st innings his average was 51 how many runs he made in the 51st innings.

8. 2 oranges, 3 bananas and 4 apples cost Rs.15 . 3 oranges 2 bananas 1 apple costs Rs 10. what is the cost of 3 oranges, 3 bananas and 3 apples

9. In 80 coins one coin is counterfeit what is minimum number of weightings to find out counterfeit coin

10. In a company 30% are supervisors and 40% employees are male. If 60% of supervisors are male. What is the probability that a randomly chosen employee is a male or female?

11. Two pencils costs 8 cents, then 5 pencils cost how much

12. A work is done by the people in 24 min. one of them can do this work a lonely in 40 min. how much time required to do the same work for the second person.

13. For a round trip, a car used 4 1/2 gallons of gasoline. If it used 1/4 more gasoline going than coming back, how much gasoline was used coming back?

14. low temperature at the night in a city is 1/3 more than 1/2 hinge as higher temperature in a day. sum of the low temp and highest temp is 100C. then what is the low temperature

15. A person who decided to go weekend trip should not exceed 8 hours driving in a day Average speed of forward journey is 40 mph. due to traffic in sundays, the return journey average speed is 30 mph. how far he can select a picnic spot

16. A sales person multiplied a number and get the answer is 3, instead of that number divided by 3. what is th answer he actually has to get ?

17. A ship started from port and moving with I mph and another ship started from L and moving with H mph. At which place these two ships meet?

18. A building with hight D ft shadow upto G A neighbor building with what height shadow C ft is

19. A person was fined for exceeding the speed limit by 10 mph. Another person was also fined for exceeding the same speed limit by twice the same. If the second person was traveling at a speed of 35 mph. Find the speed limit

20. A bus started from bustand at 8.00a m and after 30 min staying at destination, it returned back to the bustand. the destination is 27 miles from the bustand. the speed of the bus 50 percent fast speed. At what time it retur4ns to the bustand


LITERARY

Father of the Pentium

VINOD DHAM

made the chips fall his way

BY : VISHAL MANDPE
ASST. PROF.
DEPT. OF CSE

Vinod Dham – "Father Of The Pentium Chip"

" Vinod Dham is an inventor, entrepreneur and venture

He was profiled by India Abroad in 7 June' among 50 Most Influential Indian Americans. Dham was awarded the NRI a Achievement Award at the NRI Global Summit in Oct 2009 by the NRI institute.

Vinod has made great contribution to the development of highly successful Pentium Processors from Intel. At the age of 25, he left his family in New Delhi to get a graduate degree in the U.S., arriving with just $8 in his pocket and today he is the richest investor in siliconvalley. The best thing that happened to me was joining Intel and the best thing that happened to me was leaving Intel," says Dham in one of his vapid sound bites that make him so popular with journalists. An inventor, entrepreneur and venture capitalist, he is popularly known as the Father of the Pentium chip, for his contribution to the development of highly successful Pentium Processors from Intel. He is mentor, advisor and investor; and sits on the boards of many companies including promising startups funded through his India based fund – Indo US Venture Partners, where he is the founding Managing Director. Dham was the only student in his class who had worked longest in semi conductors. In 1995, at the age of 45, after spending 16 years at Intel and reaching the top management of the company, Dham had a "mid-¬life crisis" and was itching to do something different. He believed if you live in Silicon Valley and have not experienced life as an entrepreneur in a world of startups, you have missed out on a very exciting learning experience **Celebrated With:**

1993: Top 25 executives in the US computer industry.

1999: Top 100 most influential Asian Americans of the decade.

2000: he was appointed to serve on the President's advisory Commission on Asian Americans and Pacific Islanders by President Clinton.

TEACHERS

BY : ALIND DEVAL
B.TECH 3RD YR ,2CS

We had no idea where to turn,
what we know was, a lot to learn,
God knows the thirst of our knowlege , and fulfill our need,
he presented us a gift as a teacher cum friend indeed.
When the god created teachers, he gave us special friends,
to help us understand his world, and truely comprehend.
You gave us the ray of hope,
to climb high on the succeeding rope.
Whenever we just get frustrated,
You just come to make us motivated.
We choose this way because we wanted you to know
We are so much grateful for your hard work in helping us to grow

THERE IS A FIRE IN ME

BY : **ROHIT KUMAR SINGH**
B.TECH 2ND YR , CS2

I am afraid, I am troubled, I am scared to go on,
I have explored the possibility,
But is there a soul to ride along me saying come on,
I tremble in the middle of street in agony of affliction,
Tell me O Lord am I really your creation????
I lost possessions, I sunk every day,
What I called mine was different the other day,
I am at the brisk of breakage, the shore of giving up,
O pity, I did not even know how to mourn for that.

Daylight is bearable but the darkness is harder to tolerate,
Sitting at the desolate terrace I looked at the moon,
Waiting anxiously for the sleep to turn up,
Suddenly I realized a big shadow by my side,
I wanted to run away but I thought let's face it otherwise.

A man with pious appearance and milky hair was standing,
Looking at me with a serene smile as if he is pretending,
I was scared and was searching for a realm,
And then I realized o gosh I am whirling in my own dream,

He ran his finger across my head
; he looked at me with intentions deep,
I cried and cried in front of him expanding all my grief,
I remember nothing after this scene,
After all it was just a dream.

When I woke up I realized there is a desire in me
, O thou Lord somewhere there is a fire in me,
To burn the odium, to extinguish the fear
, To fight the world, to distinguish self from other.

Now I have dream, I have satisfaction,
Possibility beyond possibility is my latest affection,
I fight, I struggle, I resist, and I tremble
But I never give up the human in me,
O thou Lord there is a fire in me.

SOCIETY AND US

By :Saumya Agarwal
B.TECH 3RD YR , CS2

> We have just enough religion to make us hate, but not enough to make us love one another. - Jonathan Swift.

Most of the elder generation people that I have come across have a very different mindset from the younger ones. Our thoughts just don't match on most aspects. We can't blame it on anything particular but time or more precisely communication gap. Sadly, in the race of materialism we forget who we really are. 'Modern lifestyle with primitive instincts' is what the older ones really follow. We speak Prada, no doubt about it but they have the stink of racism in them. The rancid breath of communal hatred. "Our relative's daughter married a Muslim boy and so our entire family has boycotted that witch. Serves her right", said one of my father's Marwari friends. So proud he was, his eyes full of arrogance, rage and foolishness. Sometimes I feel claustrophobic amongst these narrow minded people. The question is, are people of different religion any different? Why this hatred? Does Hinduism,Islam,Christianity or any other religion not guide us to a better path in life? Does each religion not teach that we must love everybody equally? Do they not have two eyes and ears, one nose and mouth, limbs and sense organs?

Do they not have a soul, a feeling of compassion and affection? Do they not laugh or cry in good times or bad? Do they not feed upon the same food or drink the same water? Do they not fall sick? Are they not warmed and cooled by the same summer and winter? If they are wronged, do they not avenge? It is tragic that not only do uncles and aunties fail to seek answer to such questions, they don't even think about them. Why is getting married to somebody of a different caste, creed, community or religion a sin in our society? Why is thinking out of the box a crime ? There have been cases of parents abandoning their children for doing the same. On the one hand they boast that they can do anything for their children's happiness and on the other they abandon them. We say everybody is equal but do we really follow what we preach? India's constitution talks about equality but our political leaders do not practice it. Sadly, our voice has no impact on our society. We must do something about it. But how, is the question.


CAREER OPPORTUNITIES

PLACEMENT NEWS

A Look up in this section

Indian Oil Corporation

Energize your professional dreams with the Energy of India....

Recruitment of Engineers/ Officers through GATE-2015

Indian Oil is the transnational energy major and the highest ranked Indian company in the Fortune's prestigious Global 500 list. Through last five decades of relentless service to the nation, it has emerged as the largest business enterprise in India with a turnover of Rs 4.57 lakh crore (US$ 75.67 billion). It operates one of the Asia's largest networks of Refineries, Pipelines, Marketing and Petrochemicals business. Empowered with 'Maharatna' status, they are nurturing our vision to emerge as 'The Energy of India'.

They are looking for energetic and dedicated Graduate Engineers and Post Graduates in Geology &Geophysics (Indian Nationals only) for recruitment as Engineers/Officers. Recruitment in all the Engineering/ Geology and Geophysics disciplines will be through Graduate Aptitude Test in Engineering (GATE)-2015.

Eligible Disciplines :

1. Chemical Engineering (including Petrochemicals/Polymer Engineering but excluding Oil/ Paint Technology/Surfactant Technology/Ceramics Engineering etc)

2. Civil Engineering (excluding Construction/Environmental/Transportation etc.)

3. Computer Science & Information Technology (excluding Information & Communications Technology)

4. Electrical Engineering (including Electrical & Electronics engineering but excluding Electrical & Communication/Telecommunication Engineering/Power Engineering etc.)

5. Electronics & Communications Engineering (including Electronics Engineering/ Electronics & Telecommunications Engineering but excluding Electrical & Electronics Engineering)

6. Instrumentation Engineering (including Electronics & Instrumentation engineering but excluding Electronics & Communication Engineering/Telecommunication Engineering etc.)

7. Mechanical Engineering (excluding Automation/Automobile/Industrial/ Manufacturing/ Power/ Production Engineering etc.)

8. Metallurgical Engineering, Mining Engineering.

Renumeration

Candidates selected as **Engineers/ Officers** will receive a **starting basic pay of Rs. 24,900/-per month**. In addition, the selected candidates will receive Dearness Allowance (DA) and other allowances, according to the rules of the Corporation in force, as amended from time to time. Other allowances /benefits include HRA/subsidized housing accommodation (depending upon place of posting), medical facilities, performance related pay, gratuity, contributory provident fund, employees pension scheme, group personal accident insurance scheme, leave encashment, leave travel concession (LTC)/ LFA, contributory superannuation benefit fund scheme, conveyance advance/ maintenance reimbursement, performance related incentives (PRP) etc as per rules of the corporation.

Educational qualification:

1. Candidates should have passed qualifying degree examinations and awarded bachelor's degree in engineering/technology in the above mentioned disciplines (full time regular courses only) from recognized Indian Universities / Institutes.

3. Candidates currently in final year of their engineering studies may also apply. However, if selected, they must be in a position to submit their final mark sheet by 31st August, 2015.

2. Candidates, belonging to General and OBC (non-creamy layer) categories, should have secured minimum 65% marks in qualifying degree examinations. Qualifying marks is relaxed to 55% for Scheduled Caste (SC)/ Scheduled Tribe (ST) / PWD .

For more details login:

www.iocl.com

Selection

1. Graduate Aptitude Test in Engineers (GATE) 2015 score of the candidates in the concerned disciplines.
2. Only GATE-2015 score is valid for this recruitment exercise in Indian Oil under this advertisement. Score from GATE-2014 or from any previous GATE examination is not valid.
3. On the basis of GATE-2015 score, the candidates will be short listed for further selection process comprising of: Group Discussion (GD) & Group Task (GT)
4. Personal Interview (PI) for assessment of different facets of knowledge, skill, attitude and aptitude.
5. Candidates have to essentially qualify in the GATE-2015 examination. In addition, candidates will have to qualify through GD/ GT and also PI successfully before being adjudged as suitable for selection.
6. Final merit will be prepared based on GATE-2015 score and scores obtained by the candidates in GD/GT and PI. Merit will be prepared discipline-wise.

Important dates to remember:

Opening of GATE-2015	**: 1st September 2014**
Last Date of submission	**: 1st October 2014**
Availability of Admit Card GATE-2015	**: 17th December,2014**
Online Examination	**: 31st January, 2015 to 21st February, 2015**
Last date of receiving ONLINE application	**: 21st February 2015**

ONGC Recruitment

Oil and Natural Gas Corporation Limited (**ONGC**)

is an **Indian multinational oiland gas company** headquartered in Dehradun, India. It is a Public Sector Undertaking (PSU) of the Government of India, under the administrative control of the Ministry of Petroleum and Natural Gas. It is India's largest oil and gas exploration and production company. It produces around 69% of India's crude oil(equivalent to around 30% of the country's total demand) and around 62% of itsnatural gas.

ONGC ranks 3rd Oil & Gas Exploration & Production (E&P) Company in the world and 23rd among leading global energy majors as per Plats 250 Global Energy Companies List for the year 2009.

ONGC recruitment for Graduate Trainee across India

Eligibility :

ME/M.Tech(Ceramic, Petroleum / Petrochemical Engg), BSc(Chemistry), MCA, BE/B.Tech(Auto, chemical engineering, Civil, CSE, ICE, Mechanical Engineering, Petroleum / Petrochemical Engg, Electrical), MSc(Chemistry, Geology, Mathematics / Applied Mathematics, Phy), Diploma (Electronic Media)

Location :

Anywhere in India

Job Category :

Core Technical, Govt Jobs, BSc/BCA/BCM

Last Date: **30 Sep 2014**

Job Type : Full Time

ओएनजीसी making tomorrow brighter

ONGC

Oil and Natural Gas Corporation Ltd.

Hiring Process : Written-test.

For more details login:

www.ongcindia.com

Pay Scale : Rs. 24,900-50,500/-

Age Limit as on 01.01.2015 : 30years.

Selection Process : GATE 2015 Examination

ONGC - Job Details

S.No	Name of Post	No of Post	Qualification	GATE Subject
1.	Material Management Officer	22	Graduation in Auto/ Mechanical/ Electrical/ Instrumental/ Petroleum/ Applied Petroleum/ Chemical/ Civil/ Electronics/ E&T/ Telecom/ Computer Science Engineering	ME/ EE/ IN/ CH/ CE/ EC/ CS
2	Programming Officer	04	Graduation in Computer Science /IT or MCA or B-Level Diploma in Electronics	Computer Science

By: Sapna Yadav,

Assistant Professor ,CSE Dept

ABOUT CAT

BY : NIDHI MAHESHWARI
B.TECH 3RD YR CS2

Get details about the CAT exam paper, registration procedure, best management institutes, etc. Also have a look at past years' actual test papers, solutions, detailed analysis and practice mock CAT tests to clear the cutoff score and get admission in best MBA colleges in India.

The Common Admission Test (CAT) is an all-India test conducted by the Indian Institutes of Management (IIMs) as an entrance exam for admission to the Post-graduate and Fellow Programs in management courses of several management institutes all over India including the IIMs.

The CAT score is used separately by each institute along with other parameters i.e. academic performance, work experience, group discussion, written assessment and interview performance etc. to select candidates. The weight age assigned to CAT score may differ for each institute. Candidates are advised to read the weight age, process and breakup for each institute on its respective website.

Eligibility :

The candidate must be a graduate with 50% marks or equivalent CGPA (45% in case of SC/ST/DA/PWD) or possess an equivalent qualification recognized by the ministry of HRD, Government of India.

Candidates appearing for the final year of bachelor's degree / equivalent qualification examination and those who have completed degree requirements and are awaiting results can also apply. *(Candidate if selected needs to submit a certificate latest by 30th June 2015 from the Principal/Registrar of College/Institute stating that the candidate has completed all the requirements for obtaining the bachelor's degree/equivalent qualification on the*

Reservation

15.00%	Scheduled Caste (SC)
7.50%	Scheduled Tribe (ST)
27.00%	Other Backward Classes (OBC) candidates belonging to the "non-creamy" layer
3.00%	Differently Abled (DA)

Duration & Pattern (CAT 2014)

Section	*No. of Questions*	*Duration*
1. Quantitative Ability & Data Interpretation	*50*	*2 hrs. 50 mins*
2. Verbal Ability & Logical Reasoning	*50*	
Total	*100*	*2 hrs. 50 mins*

The Byte

October,2014

Staff Selection Commission (SSC)

SSC CGL (Combined Graduate Level) exams

By: Priyansha Mishra

Btech 3rd Year, CSE

If you are intent on a job in one of the Ministries of India or the Government of India departments, you must be well-versed with the Staff Selection Commission exam. The SSC CGL (Combined Graduate Level) exams are held every year and applicants have to clear all three tiers in the exam. Tier 1 of the SSC CGL exams involves answering multiple choice questions on subjects like Reasoning, General Awareness, Quantitative Aptitude, and General English.

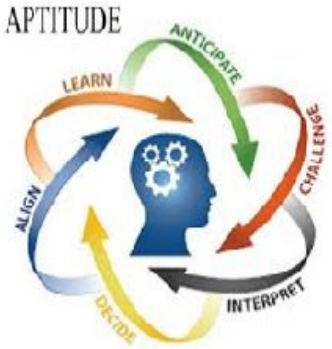
An individual has to clear all three tiers in order to be eligible for any job posts in the Ministries. The first hurdle is to pass the Tier 1 exam. As mentioned earlier, this tier consists of multiple choice questions. This tier is allotted a total of 200 marks. A candidate must have knowledge of each of these sections and study them individually. Here are a few tips that will help the candidates with each section in the Tier one.

CGL exam is 3 tier exam. An individual has to clear all three tiers in order to be eligible for any job posts in the Ministries.

Reasoning

This section is not as easy or as concrete as the quantitative section. A candidate cannot apply formulas and get an answer to any questions in this section. Reasoning is a section that tests the candidate's problem solving skills and mental observation skills. A candidate needs to be extremely vigilant while answering questions in this section. Some of the topics that the candidate can be questioned on are directions, analogy, ranking, classification, mirror images, etc. It is advised that candidates practice such problems before the CGL exam. CGL exam is 3 tier exam. An individual has to clear all three tiers in order to be eligible for any job posts in the Ministries.

Quantitative Aptitude



This Tier 1 section usually contains questions based on basic mathematics. It is an easy and scoring section, only for the candidates that are aware of the formulas. If a candidate is aware of certain short cuts to solve a problem, it is an added benefit. This will give them extra time at some of the toughest questions. This section has questions on number systems, percentages, profit and loss, interests, probability, etc. The only way a candidate can improve their mathematical ability is through hours and hours of practice .

General English

General English section is the most important section of the Tier 1.

This last section is the most important section of the Tier 1 exam. A candidate can clear this section with speed and accuracy if they have prepared well for it. The questions in this section are generally focused on general knowledge, important people and dates, books, awards, etc. The only way to prepare for this section is to watch and read national news daily, go through important dates and also the budget passed by the Government of India.

After you pass the Tier 1, you will have one month of preparation time to attempt the Tier 2 exams. The Tier 2 exams also have a multiple choice question format.

However, the syllabus and subjects for Tier 2 are different.

Quantitative Abilities – 200 marks/100 questions compulsory for all)

English Language & Comprehension – 200 marks/200 questions (compulsory for all)

Statistics – 200 marks/100 questions (only for candidates Who wish to apply for the post of Statistical Investigator .

GEMS OF CSE DEPARTMENT

MOHAMMED KASHIF

B.TECH, CSE 4TH YR

MOHAMMEDKSHF2012@GMAIL.COM

ACADEMIC ACHIEVEMENTS:

1. He got Selected as **Google Student Ambassador 2013-2014 for IMS Engineering College** and was the only student to be selected from Ghaziabad.
2. He Secured **9th Position (All over India)** in **Online Php Programming Competition** organised by **Hacker Earth** (June -2014) .
3. He is Certified as **Microsoft Technology Associate** by **Microsoft Training Academy .**
4. He qualified for Facebook Hacker Cup , 2013 .
5. Has participated in Google Code Jam , 2013.
6. He secured **3rd Rank All Over India** , in **Online Programming Contest o**rganised by JIIT .
7. He secured **World Rank of 412** qualified for 2nd round of **Codevita** organised by TCS .
8. He secured **world rank 77** in 101 Hack November organised by HackerRank .
9. He Secured **2nd Position** in **Inter-College Programming Competition** organised by **Jaypee Institute of Information Technology ,Noida . (Knuth Programming Context 2014)** organised by IBM.
10. Secured **2nd Position** in **Inter-college programming event** organised by IEC College, Noida (Innovision 2013).
11. Secured **1st Position** in **Inter-college Programming Competition** organised by **Krishna Institute of Engineering and Technology** ,Ghaziabad (Genesis 2013).
12. Secured **1st Position** in **C--Quiz and Programming Competition** organised by IT department and MCA Department at IMSEC- (2012)
13. Currently has an **aggregated percentage of 79%.**
14. Secured **1st Prize** in inter school programming competition in **Info-Bazaar 2011** organised by **Cathedral Senior Secondary School ,Lucknow ,** in which over 150 schools participated .
15. Secured **Second Prize** in **Website - designing competition** in I**nfo-Bazaar 2011** organised by **Cathedral Senior Secondary Sc hool ,Lucknow ,** in which over 150 schools participated .

AWARDS AND RECOGNITION

1. He completed an online course from MIT and obtained **80% marks** in the exam.
2. He is the **Founder** and active member of **Google Students Club IMSEC.**
3. He was **Head Technical Co-ordinator** of Esperanza -2014 organised at IMSEC by CS and IT department.
4. He has organised various technical events and workshops , in coordination with the CS department.
5. Based on his excellent performance , he was selected by CS , IT and MCA department to teach basic concepts of programming to first year students.
6. He is an active participant of various online programming competitions.
7. He is Certified as **Microsoft Certified Professional** by **Microsoft Training Academy .**
8. He secured **World Rank 92** in Online programming Competition , organised by **HackerRank (101 Hack April 2013).**

PROJECTS UNDERTAKEN:

1. **A CUI Based Operating System With Minimalistic Features**
   The project aims at developing an Operating System with minimalistic features , such as provision for compiling a C program. Currently I am using x86 simulator in Ubuntu to program and test the code.The bootloader is completely functioning as of now . The work on kernel is in progress.

2. **Geo Location based Twitter Search :** The project searches for tweets based on your location specifically . For e.g. is you are in Delhi , and search for a particular tweet , the results will be displayed on various parameteres such as radius of 30 km from yr location etc.

3. **Scrabble** (Individual project based on networking using python)This project would implement the various libraries in Python to manipulate and send information using sockets over the network.The project makes use of various networking libraries available in Python to perform communication between various devices.

4. **Hangman** (Individual Project -Python): A text-based version of Hangman in Python . It makes use of File-handling and various other basic function/utilities in Python.

2. **Snake game** (Individual Project - C++) : Used the graphics library in C++ to make a Snake game similar to the one Nokia phones.

3. **Inventory Management and Analysis System** (Php , Ajax , javascript ,CSS and HTML5 -Individual Project) : The user would login and provide information regarding the stock available in inventory . He could modify,delete and insert andy record. Ajax was used to display record dynamically , based on product ID , etc. JSON and MySQL was used to display Charts using Javascript.

4. **Computer Science Department Portal** (Group of 5 members -J2EE with Sturts)
   Module Developed : Admin Module
   This project consisted of 3 types of Users - Admin , Teacher and Student .Students could only view and edit their information , while the Teacher could issue notices . The Admin module could perform any operation ,including deleting/adding users, notices,etc.

OTHER AWARDS AND ACHIEVEMENTS :

1. **Co-Founder and Content Developer at TechDevta .**
   TechDevta is a source of Technology news, articles, videos, tutorials on web development, Linux, Windows, iOS, ` Android with Computer Science Programs and Interview Q-A.
2. **Technical Content Developer** - Ubuntu ar DevilShouts.com .
3. Has conducted technical workshops for over 150 students .

AKSHAY BHASIN

CSE 3RD YR

AKSHAY15894@GMAIL.COM

ACADEMIC ACHIEVEMENTS

1. He secured 2nd position in CBSE 10th standard with CGPA 9.6.
2. He secured 2nd position in CBSE 12th standard with 92.2%.
3. He obtained 97 marks in Mechanics subject in 2nd semester.
4. He secured 1st position in college in 3rd semester with 82.5%.
5. His Btech. Current percentage: 83%.

AWARDS AND RECOGNITION

1. He qualified for 2nd round in TCS CODEVITA 2013.
2. He ranked 3rd in programming competition in inter college fest held at KIET, GHAZIABAD
3. He represented IMSEC at AMITY YOUTH FEST 2014 and won the programming and debugging contests.
4. He secured 3rd position in programming contest held at Ambedkar Institute of Technology Delhi.
5. He represented IMSEC at JAYPEE INTER COLLEGE FEST in programming competition sponsored by IBM and secured 2nd position overall.
6. He qualified for 2nd round of TCS CODEVITA 2014 among 1 lakh aspirants and got direct entry into TCS interview for job position.
7. He is currently working in Techdevta.com as a programming expert and currently writes blog on programming concepts.

PROJECTS DEVELOPED

1. He developed Library management system in C++.
2. He developed a mind reader game using graphics in C++.
3. He developed Kaun Banega Crorepati game in Java.
4. He developed Examination application on LAN using multithreading in Java.
5. He developed Chatting window for LAN users in Java.
6. He is currently working on building REVERSI/BACKAGAMMON game using swings in Java.

OTHER ACHIEVEMENTS

1. He is currently the President of college programming club The Code Raiders.
2. He has organized various programming events and other events such as workshops and seminars.
3. He has been a part of co-coordinating team in pre-placement activities held in college for campus drive for TCS.

ABHINAV BHADORIA

CSE 4TH YR

ABHINAV.BHADORIA1594@GMAIL.COM

TECHNICAL ACHIEVEMENTS:

1. He was selected for onsite round in ACM-ICPC 2013 Regionals, Amritapuri.
2. He participated and cleared 2 rounds of Google Code Jam, 2014.
3. He secured World rank 347 and All India rank 172 in April Challenge 2014 organized by codechef.com
4. He secured World rank 85 in Ingus – Online Algorithmic Coding Competition 2014 organized by IIT Jodhpur.
5. He secured 1st rank in programming competition organized by Google Students Club at IMSEC, 2013.
6. He secured World rank 166 in Code Niche organized by IIT-BHU Varanasi 2014
7. He secured World rank 196 in Prometheus organized by Manipal Institue of Technology, Manipul 2014.
8. He secured World rank 134 in Game of Code 2014 organized on codechef.com.

EXTRA-CURRICULAR ACHIEVEMENTS:

1. He is the Founder Member of CodeChef (A Directi Initiative) Chapter at IMS Engineering College, under the name of "Top of Stack".
2. He had hosted and organized an Inter college level coding competition under his Codechef chapter, 2014.

PROJECTS:

1. **Project Title** **:** Open source Genetic Algorithm Toolbox

Description: This is a toolbox to run a GA on any problem you want to model. We can use one of the sample problems as reference to model various problems with a few simple functions. We can collaborate by defining new example problems or new functions for GA, such as scaling, selection or adaptation methods.

2. **Name** : Fly Birdie Fly

Tools : C#, Unity3D, Inkscape, Monodevelop, **Platforms**: Android, Web, Windows

Description: Fly Birdie Fly is a side-scrolling game featuring 2D style graphics. Player controls the bird who moves continuously to the right, between each oncoming set of pipes. Game contains local multiplayer, multiple game modes, etc.

Link: https://googledrive.com/host/0BylcHLHDcRemRFVVNlVjNkNUWTA/WebBuild.html

3. **Name** : Cube3

Tools : C#, Unity3D, Inkscape, Monodevelop, **Platforms** : Android, Web, Windows

Description: Cube3 is a game where the player simply taps to rotate the triangle to collect the incoming balls. If the color of triangle's side and ball is different than game overs.

Links:https://googledrive.com/host/0BylcHLHDcRemVTF6RG44QmZtUlE/WebBuild.html

4. **Name** : Sensor++

Tools : Eclipse, Android SDK, **Platform** : Android

Description: Sensor++ is an android app that list all sensors available on the device including accelerometer, magnetic field, etc. Perfect for showcasing capabilities of new device.

DHRUVBAJPAI

CSE 4TH YR

BEINGDHRUV08@GMAIL.COM

TECHNICAL ACHIEVEMENTS:

1. He was selected for onsite round in **ACM-ICPC 2013** Regionals, Amritapuri.
2. He got**World Rank 8** in coding competition organized by IEEE and UVCE N-Code November 2013.
3. He cleared round 1 of **TCS Codevita**with **rank 160** while 2nd round results are still awaited**.**
4. He is currently among **top 260** coders in **India** and among **top 450** in **World** according to **Codechef**
5. He participated and cleared 2 rounds of **Google Code Jam** , 2014.
6. He secured **World Rank 68** and **All India Rank 37** in August Long Challenge 2014 organized by codechef.com
7. He got qualified for **Facebook Hacker Cup**, 2013.
8. He got qualified for **Facebook Hacker Cup**and cleared 2 more rounds, 2014.
9. He secured **2nd Rank** in coding competition organized by Jaypee Institute of Information Technology, Noida, March 2014.
10. He secured **World Rank 48** and **All India Rank 10** in February Lunchtime 2014 organized by codechef.com
11. He secured **World Rank 315** in **CodeSprint5** 2014 organized by HackerRank.com
12. He secured **World rank 112** and **All India rank 43**in April Challenge 2014 organized by codechef.com
13. He secured **World rank 69** and **All India rank 57** in Ingus – Online Algorithmic Coding Competition 2014 organized by **IIT Jodhpur**.
14. He secured **1st rank** in programming competition organized by Google Students Club at IMSEC, 2013.
15. He secured **World rank 159** in Code Niche organized by IIT-BHU Varanasi 2014
16. He secured **World rank 159** in Code Crunch organized by codechef.com 2013

EXTRA-CURRICULAR ACHIEVEMENTS:

1. He was hired as an **Intern** at **Soncepts Software Solution Pvt. Ltd.**
2. He is the **Founder Member**of CodeChef (A Direct Initiative) Chapter at IMS Engineering College, under the name of "Top Of Stack"
3. He is the **College Representative** of **E-cell IIT-Bombay**2014-15.
4. He had hosted and organized an **Inter college level coding competition** under hisCodechefchapter,2014

PROJECTS UNDERTAKEN:

1. **DevelopE-Prescription application**

Status :-Developed , **Technology Used** :- .Net(VB)
Description:-E-prescription System is made for Doctors and Pharmacy. This helps Doctor to prescribe medicine to the patient and send those details to the pharmacy so that patient could collect the medicine from that pharmacy easily. This system prevents the unregulated distribution of medicine.. This project has been suggested to **PMO** for **National Level** implementation.

2. **Project Title :- Open source Genetic Algorithm Toolbox**

Status :-In Progress , **Technology Used** :-C#
Description:-This is a toolbox to run a GA on any problem you want to model. We can use one of the sample ce problem with a few simple functions. We can collaborate by defining new example problems or new functions for GA, such as scaling, selection or adaptation methods.

POORVAK KAPOOR

CSE 4TH YR

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Academic Achievements

1. He has been an active participant in **online coding competitions**.
2. He was selected for the on-site round Amritapuri of **ACM-ICPC** (International coding competition) in the year 2013, securing the **top notch rank in all Ghaziabad Zone** .
3. He got qualified for **Facebook Hacker Cup**, 2013.
4. He got qualified for **Facebook Hacker Cup** and cleared 2 more rounds , 2014.
5. He participated and cleared 2 rounds of **Google Code Jam** , 2014.
6. He got **World Rank 56** in coding competition organized by IEEE and UVCE N-Code November 2013.

Awards & Recognition

1. He was hired by **Soncepts Software Solutions Pvt. Ltd.** for the profile of **Software Developer**, Intern for Summer 2014.
2. He is the head of the **CodeChef** Chapter **"Top Of Stack"** in our College, and have organized many coding competitions in the college. He have organized many seminars to promote competitive coding practices in college.
3. He has organized an **Inter College Coding Competition** in the Technical Fest.
4. He has been the **Head of the Photography Committee**.

Projects Undertaken

1. **W.A.S.P(Winning & Scoring Prediction)**

   His project was a smooth combination of excellent crafted algorithms and computation, to compute and predict the success probability of a commodity in the market depending upon the market analytic, company strategy and different marketing conditions.

2. **E-Prescription**

   His internship project involved real world scenario as it was aimed to improve the general medicine cycle involving the Doctor, Patient & Pharmacy. His project has been proposed to **Prime Minister Office** for National level implementation.

3. **Image Easy Application**

   His project works like a handle with a machine, by providing the revolutionary idea of using images as the source of input (real world surroundings) for searching similar products on E-Shopping websites. Thus, provides the functionality of comparing products online based on Image retrievals.

THE BYTE TEAM

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Shubham Sinha
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Prabhat Kumar

Dear Readers

We write this in a positive frame of mind and we're really glad that we've got this far.

It was crazy when we started it but when it all came together we were more than happy.

The whole industry is undergoing profound changes and we'll be talking about a few of them.

We're very proud of the work displayed here by the writers, photographers and designers who made this issue possible.

We hope you enjoy reading these articles, as seen through the IMS student's journalistic eye.

.....FROM THE BYTE TEAM