foCuSE

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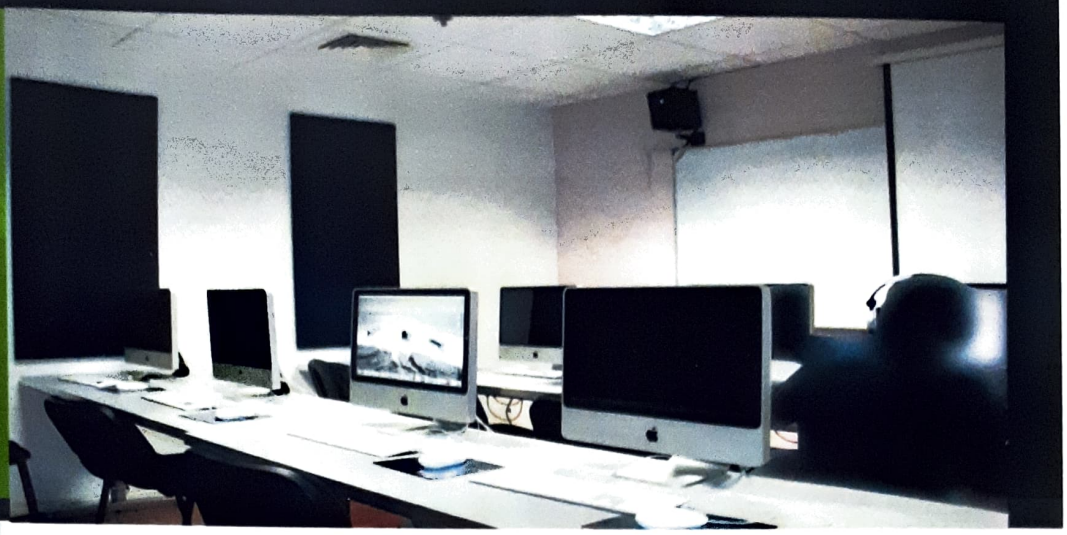
Newsletter
Depar tment of
Computer Science and Engineering



Principal Message

I am very much pleased with the upcoming idea of releasing newsletter from the Department of Computer Science and Engineering of Kakatiya Institute of Technology & Science, Warangal. This is really a very good effort to keep the students abreast of the new technological trends and directions in the field of Computer Science & Engineering.

- Dr.K.Ashoka Reddy.

Cheif Editors' Message

It gives me immense pleasure to announce the release of CSE department newsletter, foCuSE. The unique feature of the newsletter is that it is being planned and designed by the student fraternity alone. I wish that the tempo is continued in the days to come.

- Prof P.Niranjan Reddy.

Recent Events

Technoplexus is a national level symposium conducted by the department of Computer Science and Engineering during the even semester every year. This event is organized with the objective of extracting the hidden talents of budding engineers belonging to various Engineering colleges all over India. Under this banner, the events like "Paper presentation", "Poster Presentation", workshops on latest trends in Information Technology are organized.

Organized Programs

1. Campus Connect Program - INFOSYS-HYD/IEG-HYD - 01-09-2009 to 23-04-2010 - 70 days - IBM Lab & Auditorium .
2. Online Exam (FP-1) - INFOSYS-HYD/IEG-HYD - 23-03-2010 - Computer centre.
3. Online Exam (FP-2) - INFOSYS-HYD/IEG-HYD - 23-04-2010 - Computer centre.
4. Spark Training Program - INFOSYS Technologies-Hyderabad - 10-07-2010.
5. Campus Connect Program - INFOSYS-HYD/IEG-HYD - 10-08-2010 to 03-09-2010 IBM Lab .
6. Online Exam (FP-1) - INFOSYS-HYD/IEG-HYD - 21-08-2010 - Computer centre.
7. Online Exam (FP-2) - INFOSYS-HYD/IEG-HYD - 28-08-2010 - Computer centre.
8. DB-2 - IBM/JKC-HYD - 28-09-2010 to 12-10-2010 - Auditorium
9. DB-2 (online exam) - IBM-Bangalore - 19-10-2010 - Computer ce.ntre/IBM lab.
10. Online exam Sapient - 06-12-2010 - IBMlab/Information lab/Multimedia lab.
11. Online exam - TCS-Hyderabad - 27-12-2010 - IBMlab/Information lab/Multimedia lab/GUI Lab/Graphics Lab/Digital Library.
12. Online exam - Mahindra Stayam - 05-01-2011 - IBMlab/Information lab/Multimedia lab/ GUI Lab/Graphics Lab/Digital Library.
13. Online Exam - Syntel 24-01-2011 - IBMlab/Information lab/Multimedia lab/GUI Lab/Graphics Lab/Digital Library.
14. Online Exam - Sapient - 12-03-2011 - IBMlab/Information lab/Multimedia lab.
15. Online Exam - GITAM-University - 15-04-2011 to17-04-2011 - IBMlab/Informationlab/ Multimedia lab.

Organized Programs Contd...

16. IBM-DB2 IBM-Hyderabad 11-07-2011 to 13-07-2011- IBM Lab.

17. CRT Program Carrier Path Solutions Ltd. 14-07-2011 to 16-07-2011

- Sliver Jubilee Seminar Hall

18. Aptitude Carrier Path Solutions Ltd - 29-07-2011 to 31-07-2011

- New seminar Hall.

18. Online Exam IBM-DB210-08-2011- IBM lab.

19. Online Exam JKC-Nascom 26-08-2011 - Web Technology Lab & Software Engineering lab.

20. Online Exam& InterviewsTCS-Hyderabad - 16-09-2011 to 17-09-2011 - Web Technology Lab / Software Engineering lab/IBM lab Block -IV.

21. Online Exam Accenture-Bangalore - 28-09-2011- Web Technology Lab /Software Engineering lab/IBM lab.

22. Work shop Techaves - Bangalore - Web Technologies - 01-10-2011 - Web Technology.

23. Online Exam Syntel - 13-11-2011 - WebTechnology Lab/ Software Engineering lab/IBM Lab.

GENERATION OF COMPUTERS

The first electronic computer was designed and built at the University of Pennsylvania based on vacuum tube technology. Vacuum tubes were used to perform logic operations and to store data. Generations of computers has been divided into five according to the development of technologies used to fabricate the processors, memories and I/O units.

I Generation : 1945 – 55
II Generation : 1955 – 65
III Generation : 1965 – 75
IV Generation : 1975 – 89
V Generation : 1989 to present

First Generation (ENIAC - Electronic Numerical Integrator And Calculator EDSAC – Electronic Delay Storage Automatic Calculator EDVAC – Electronic Discrete Variable Automatic Computer UNIVAC – Universal Automatic Computer IBM 701)

-->Vacuum tubes were used – basic arithmetic operations took few milliseconds Bulky.
-->Consume more power with limited performance
-->High cost
-->Uses assembly language – to prepare programs. These were translated into machine level language for execution.
-->100 to 1000 fold increase in speed relative to the earlier mechanical and relay based electro-mechanical technology.
-->Punched cards and paper tape were invented to feed programs and data and to get results.
-->Magnetic tape / magnetic drum were used as secondary memory.

Second Generation (Manufacturers – IBM 7030, Digital Data Corporation's PDP 1/5/8 Honeywell 400)

-->Transistors were used in place of vacuum tubes. (invented at AT&T Bell lab in 1947) Small in size.
-->Lesser power consumption and better performance.
-->Magnetic tapes and magnetic disks were used as secondary memory.
--> Hardware for floating point arithmetic operations was developed.
-->Index registers were introduced which increased flexibility of programming.
-->High level languages such as FORTRAN, COBOL etc were used - Compilers were developed to translate the high-level program into corresponding assembly language program which was then translated into machine language.
-->Separate input-output processors were developed that could operate in parallel with CPU. Punched cards continued during this period also.

Third Generation (System 360 Mainframe from IBM, PDP-8 Mini Computer from Digital Equipment Corporation)

-->ICs were used.
-->Small Scale Integration and Medium Scale Integration technology were implemented in CPU, I/O processors etc.
-->Comparatively lesser cost.
-->In the beginning magnetic core memories were used. Later they were replaced by semiconductor memories (RAM & ROM).
-->Introduced microprogramming.
-->Operating system software were introduced (efficient sharing of a computer system by several user programs).
-->High level languages were standardized by ANSI eg. ANSI FORTRAN, ANSI COBOL etc.

Fourth Generation (Intel's 8088,80286,80386,80486 .., Motorola's 68000, 68030, 68040, Apple II, CRAY I/2/X/MP etc)

-->Microprocessors were introduced as CPU– Complete processors and large section of main memory could be implemented in a single chip.
-->Tens of thousands of transistors can be placed in a single chip (VLSI design implemented).
-->Semiconductor memory chips were used as the main memory.
-->Secondary memory was composed of hard disks – Floppy disks & magnetic tapes were used for backup memory.
-->Introduced C language and Unix OS.
-->Introduced Graphical User Interface.
-->High performance, lower cost and very compact.
-->Much increase in the speed of operation.

Fifth Generation (IBM notebooks, Pentium PCs-Pentium 1/2/3/4/Dual core/Quad core.. SUN work stations, Origin 2000, PARAM 10000, IBM SP/2)

-->Generation number beyond IV, have been used occasionally to describe some current computer system that have a dominant organizational or application driven feature.
-->Computers based on artificial intelligence are available.
-->Computers use extensive parallel processing, multiple pipelines, multiple processors etc.
-->Introduced ULSI (Ultra Large Scale Integration) technology – Intel's Pentium 4 microprocessor contains 55 million transistors millions of components on a single IC chip.
-->Memory chips up to 1 GB, hard disk drives up to 180 GB and optical disks up to 27 GB are available (still the capacity is increasing).
-->Object oriented language like JAVA suitable for internet programming has been developed.
-->Storage technology advanced – large main memory and disk storage available.
-->Introduced World Wide Web. (and other existing applications like e-mail, e Commerce, Virtual libraries/Classrooms, multimedia applications etc.).

Hardware

The term "hardware" refers to the physical parts of a computer system. The basic hardware of a computer system includes:

Case : The box that holds the circuitry for the computer. One of the main chips inside is called the central processing unit, or CPU for short.

Drives : Nearly all computers have an internal hard drive used to store information. There are many other types of drives, such as external hard drives, CD and DVD drives that can be used to store information on CDs or DVDs.

Keyboard: The device used to type and enter information into the computer.

Mouse : A pointing device used to move the cursor displayed on the monitor. Laptops generally use a trackpad or touchpad instead of a mouse to move the cursor.

Monitor : The screen that shows the information for the computer; also called a display.

Printer : The printer takes the information displayed on the screen and prints it on paper.

Software

Software is a term used to describe a computer program, which is a set of instructions that tells the computer what to do. Software can be split into three categories. They are:

Programming software. This software is used by computer programmers to help write computer code.

Operating system software : This software runs the computer. It has the instructions for using memory, video cards, keyboards, etc. Two common operating systems are Windows XP and Macintosh OSX.

Applications software : There are literally thousands of different software applications. A brief overview of some of the more common ones includes:

Microsoft Office – this combination of several programs includes:

Microsoft Word – A word processing program that is used to type such things as letters, reports and newsletters.

Microsoft Excel – A spreadsheet program that can be used to calculate numerical data, store data and make charts.

Microsoft PowerPoint – A presentation program that is used to make slides of information and graphics.

Web browsers - These programs allow users to navigate the Internet. Some of the more common ones include Microsoft Internet Explorer, Netscape Navigator, Mozilla Firefox and Apple Safari.

Adobe Photoshop - Photoshop is a graphics editing program. The program is commonly used to enhance digital photos.

Reduce Spam Quickly
Reduce spam and relax! Guaranteed spam filtering
What is SPAM?

Have you recently noticed that you have been receiving massive amounts of emails from people and companies you do not even know?
And these messages relate to the sale of sexual, brain, body enhancers, drugs, special medicines, financial investments and the list goes on and on!

There have been cases where end users have been receiving spam messages in the order of 300-500 a day! Wouldn't this drive you crazy? Most of your time is wasted analysing each message to see if it pertains to you or your business activities. This is also a waste of money.

Spam is the illegal practice of abusing electronic messaging systems (email servers) to indiscriminately send unsolicited bulk messages.
The most widely known form of spam is e-mail spam, also identified as Unsolicited Commercial Email (UCE).

But there are other forms such as usenet newsgroup spam, web search engine spam, blog spam, wiki spam, mobile phone messaging spam, instant messaging spam, forums spam etc.

Spamming is conducted by unscrupulous advertisers in the hope of selling products to naive users. It is like receiving junk mail in your letterbox.

Spam is costly to the community. It lowers people's productivity, reduces file server performance, and creates bottle necks in your internet connection by slowing it down.

It can mislead people into buying products from not reputable and untrustworthy companies. Would you trust these companies with your credit card details? The sexual nature of certain emails may embarrass you and may even offend you.

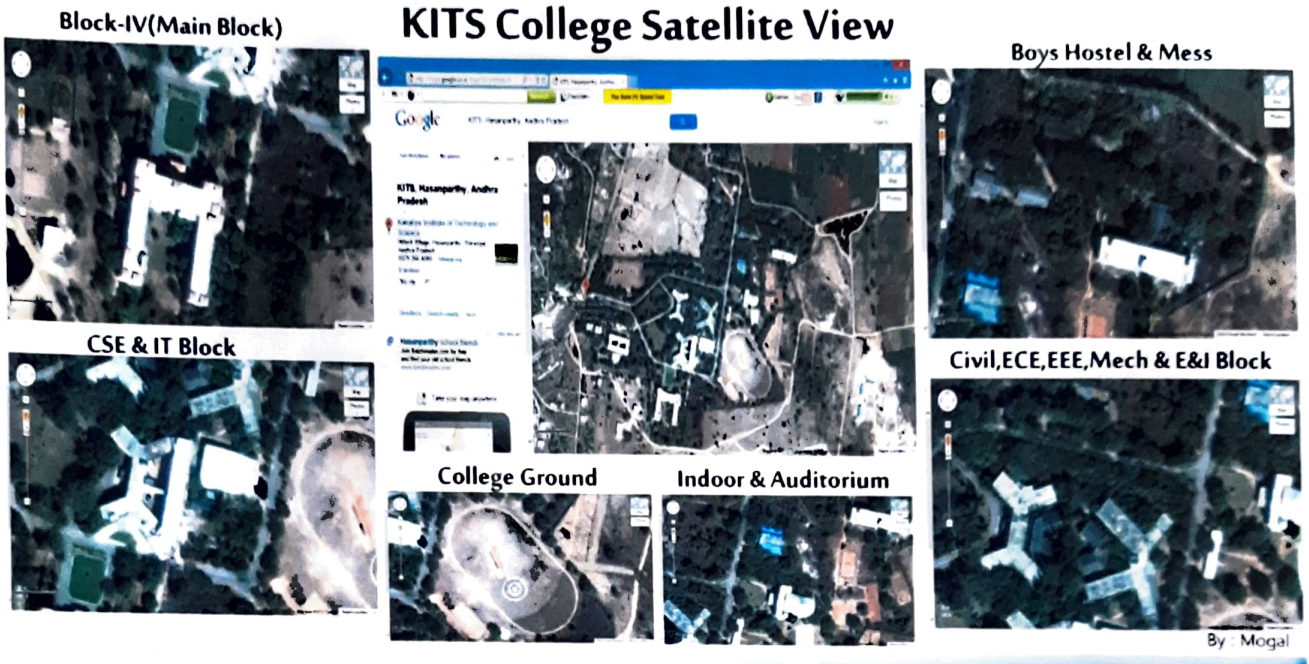
Spam is hard to track down because it is sent from fake email addresses and servers from around the globe. It mainly originates from countries such as the US, China, South Korea, the Netherlands, Brazil, Germany, France, the U.K., Australia, Mexico, and Spain.

So how do you protect yourself from it? One way is to be very wary of free offers on the internet where they ask you for your email address.

If you really want to sign up, I would personally create another email address on some of the free email service providers out there on the internet and use this instead of your regular company email address. Therefore your alternative email address would be spammed rather than your company one.

If your business is running an in-house email server such as Microsoft Exchange 2003 and you are receiving tons of email spam daily, I would suggest using a spam filtering service hosted by an off-site provider.

Satellite View of KITS College



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