

Infoques Info



Elixir of Technology..



Reclaming its Throne



VoIP over Wi-Fi



Learn Word Processing Machine

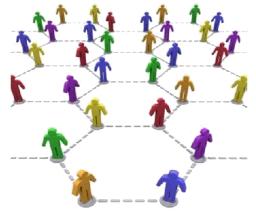


Wandering of Digital Ants



Google Chrome





Crowd Sourcing

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Department of Information Technology

Vision

To become the most wanted department for students to acquire quality education, for industries to absorb skilled aspirants, for parents to groom their words, for academicians to work and for society to fulfill their needs

Mission

- To impart world-class knowledge in the field of Information Technology to our students to create an atmosphere for students to acquire respect for moral values and a sense of their duties as citizen
- To develop all round personality by inculcating the values of honesty and sincerity among students.
- To provide academicians an environment, for up-grading the knowledge. To carryout research and development activities.
- To provide IT enabled services and support to our society.
- To stimulate in students a habit of undergoing on-site /off shore project works to improve team spirit & work culture.

Programme Educational Objectives

- **P1 Technical Expertise:** To educate and guide the students in attaining sound technical skills and knowledge, which would conform to the needs of IT industry.
- **P2 Personality Development:** To mould the overall personality of the students by providing training and opportunities to enhance their communication skills, team management, co-ordination skills and leadership skills.
- **P3** Career Building: To guide and create awareness among the students to procure and march successfully in the field of Information and Communication Technology.
- **P4 Social Responsibilities:** To impart ethical values and create concern for society and environment.

Programme Outcomes

- a. An ability to apply the knowledge of mathematics, science and basic engineering such as Fourier series, Probability and Queuing theory, Numerical Methods, Transforms, Partial Differential Equations, Material science, Environmental science.
- b. An ability to design, conduct and analyze IT & IT Enabled Services applications.
- c. An ability to design databases, web based systems and configure computer networks to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- d. An ability to work with various domain experts in teams.
- e. An ability to identify and solve IT & IT Enabled Services related problems.
- f. An ability to demonstrate knowledge of professional and ethical responsibility.
- g. An ability to communicate professionally and effectively in their working environment.
- h. An ability to display skills required for continuous learning and improvement to understand the impact of IT solutions in a global, economic, environmental, and societal context.
- i. An ability to have a tendency for consistent self learning and education.
- j. An ability to have knowledge about contemporary developments.
- k. An ability to apply modern IT technologies and tools necessary for IT practice.
- l. An ability to learn by oneself and as team and to disseminate the knowledge gained to the fellow students on the cutting-edge technologies in the domains such as Information Processing, Speech & System Interfacing, Data Mining, Networks & Security, Web Technologies, Open Source Technologies, Mobile Computing and Cloud Computing.

DIGITAL ANTS

When attacks are in various biological names like virus, worms, by imitating the nature's actions, why not the defence of such elements be in the same way??? Security experts have started taking cues from nature to protect computer networks from intruders, and in one such attempt they have created a new defence mechanism that mimics one of the hardiest creatures in the world ——The Antll.

Unlike traditional security devices, which are static, these "digital ants" wander through computer networks looking for threats, such as "computer worms" - self-replicating programs designed to steal information or facilitate unauthorized use of machines.

On detecting a threat, the digital ant quickly signals an army of ants to converge at that location, drawing the attention of human operators who step in to investigate.

This concept, so called "swarm intelligence", promises to transform cyber security because it adapts readily to changing threats.

"In nature, we know that ants defend against threats very successfully. They can ramp up their defense rapidly, and then resume routine behavior quickly after an intruder has been stopped. We were trying to achieve that same framework in a computer system.

With new variations and updates of worms and malware, security programs gobble more resources, antivirus scans take longer and machines run slower - a familiar problem for most computer users.



Glenn Fink, a research scientist at Pacific Northwest National Laboratory (PNNL) in Richland, Wash., came up with the idea of copying ant behavior.

Fink invited Fulp to join a project that tested digital ants on a network of 64 computers. In the study, Fulp introduced a worm into the network, and the digital ants successfully found it. The scientists said that the new approach is best suited for large networks.



R.PRAVEENA 2nd IT

IBM Reclaiming Its **Thorne**

IBM is climbing back to the top of the big heap. The so-called Sequoia supercomputer is expected to leap-frog its competitor —Crayll 15 times over.

The computing giant announced a deal to sell a new supercomputer - one that it says will be the most powerful in the world - to the U.S. Department of Energy (DOE). It is also said that,

—The Sequoia system will be **capable** of crunching numbers 20 times faster than IBM's last record-breaker and 15 times faster than the current fastest machine- Cray's JAGUARII.

IBM has promised the DOE that the computer, a part of its Blue Gene series and scheduled for delivery in 2011, will be capable of 20 petaflops, or 20 quadrillion floating operations per second. i.e., the equivalent of completing calculations in an hour would take 2500 years for a typical Intel-powered laptop or by IBM's count, 320 years for the entire population of the planet armed with pocket calculators, to complete.

Like its predecessor, the one-petaflop Road Runner, Sequoia will be offered for general use to the scientific community for several months before it's put to use in modelling the deterioration America's nuclear weapons stockpile. The DOE will house the computer in its —Lawrence

Livermore National Laboratoryll, in Livermore, California.

The Sequoia announcement was the answer to Jaguar supercomputer of CRAY, which last November challenged IBM's lead in supercomputing race using clusters of AMD chips to achieve processing speeds of I.6 petaflops, 60% faster —IBM's than the Road Runnerll, that broke the so-called "petaflop barrier" in June.



-But Sequoia will do more than leapfrog Jaguarll, says IDC analyst Earl

Joseph. He argues that Sequoia could vastly outpace Moore's Law and set a new standard for supercomputing for years to come, much as Japanese company NEC's Earth Simulator remained the top-ranked supercomputer for much of the earlier part of the decade.

"This has created a bar much higher than we all expected," Joseph says. "If they had said 20 petaflops by 2015, that wouldn't have been a surprise. By 2011? That's a real eye-opener."

If Sequoia stays ahead of the crowd, it won't represent new technological innovation so much as the validation of an older IBM strategy: building chips that are focused more on

cooperation than individual power. While its competitors like Hewlett-Packard and Cray have packed Intel's and AMD's PC-oriented x86 processors into their machines, IBM has crafted its own chips in Sequoia's case - a custom built version of its gadget-focused Power processor aimed

HARD DISK PARTITIONS

FAT 16:

Maximum Partitions : 23
Maximum Size : 2GB
Minimize Partitions : 1

Minimize Partitions : 1
Minimize size :

512MB FAT 32:

Maximum Partitions : 23 Maximum Size : 32

GB

Minimize Partitions : 1 Minimize size :

512MB

B.SASIKUMAR

FINAL IT

specifically at supercomputer applications.

That approach, IBM says, will now allow it to pack 18 processing cores onto a single chip(not just 4 as INTEL). The system as a whole will use I.6 million cores. Each chip will have its own built-in networking hardware and memory, reducing data bottlenecks between chips processing in parallel. And those processors will be arranged in a three-dimensional torus shape(two interlocking donuts)

to bring each chip as close as possible to every other chip in the configuration.

Just as important as those physical tweaks for improving processors' the networking cooperation is software that ties them together, says IBM's vice president for Deep Computing, David Turek. Like older Blue Gene supercomputers, Sequoia will use five networks that split up and route data to optimize its ability to processing throughout share system.

"Types of communication aren't homogeneous, and if you organize them properly you see dramatic speedups in communication," Turek says. "It's like we're setting up one network for trailer trucks, another for pleasure drivers, another for people driving to and from work. You design your roads differently for what they require."

IBM's strategy has a price, argues Cray Chief Executive Peter Ungaro. Though it offers faster speeds for the applications it's custom-designed to run, it can't match x86-based systems in their breadth of uses.

"One size doesn't fit all," Ungaro says. "In this customer's case, having more lower-power processors makes sense. But for our customers, they want fast processors that can address an array of problems. Climate change, material science research or next-generation energy problems all require different

applications, and we want to build one machine that can address all of them." But commodity processor systems have their own problems: They are far less energy efficient than custom-designed chips, and their heat production means they take up far more room. Jaguar, for instance, uses more than IO times Sequoia's energy per calculation and takes up 5,800 square feet; Sequoia takes up 3,500 square feet.

Cray's Ungaro says he isn't focused on the debate between commodity and custom supercomputer strategies. Instead, he argues that the neck-andneck competition in high-performance computing is a sign that the development of big-iron computing in general is healthier than ever.

"With these big machines, one betters another every few months pretty regularly," he says. "Overall, that's great for the high-performance computing community, and it means that people are understanding more and more about what these machines are capable of.

C.DEEPIKA 1st IT

Puzzle 01:

What percent of 60 is 12? Ans: Pg 26

How Companies Got their Name

Apple Computers

It was the favourite fruit of founder Steve Jobs.

CISCO

It is not an acronym as popularly believed. It is short for San Francisco.

Compaq

This name was formed by using COMp, for computer, and PAQ to denote a small integral object.

Google

The name started as a joke boasting about the amount of information the search-engine would be able to search. It was originally named _Googol', a word for the number represented by I followed by I00 zeros. After founders - Stanford graduate students Sergey Brin and Larry Page presented their project to an angel investor, they received a cheque made out to

_Google⁶

Hewlett Packard

Bill Hewlett and Dave Packard tossed a coin to decide whether the company they founded would be called Hewlett-Packard or Packard-Hewlett.

Intel

Bob Noyce and Gordon Moore wanted to name their new company

Moore Noyce' but that was already trademarked by a hotel chain so they had to settle for an acronym of INTegrated ELectronics.

Microsoft

Coined by Bill Gates to represent the company that was devoted to MICROcomputer SOFTware.
Originally christened Micro-Soft, the __-' was removed later on.

Motorola

Founder Paul Galvin came up with this name when his company started manufacturing radios for cars. The popular radio company at the time was called Victrola.

Sony

It originated from the Latin word 'sonus' meaning sound, and 'sonny' a slang used by Americans to refer to a bright youngster.

Corel

The name was derived from the founder's name Dr.Michael Cowpland. It stands for COwpland REsearch Laboratory.

SUN

Founded by 4 Stanford University buddies, SUN is the acronym for Stanford University Network. Andreas Bechtolsheim built a microcomputer; Vinod Khosla recruited him and Scott McNealy to manufacture computers based on it, and Bill Joy to develop a UNIX-based OS for the computer.

Yahoo

The word was invented by Jonathan Swift and used in his book _Gulliver's Travels'. It represents a person who is repulsive in appearance and action and is barely human. Yahoo! Founders Jerry Yang and David Filo selected the name because they considered themselves yahoo

B.SASIKUMAR FINAL IT

VoIP over Wi-Fi

Voice Over Internet Protocol (VoIP) can provide substantial savings on our telephone service by allowing us to use an IP network to make phone calls instead of the traditional telephone companies' public switched telephone network (PSTN). Many organizations today run IP networks over wireless technology, and it's possible to run

VoIP applications over Wi-Fi, too. But we need to be aware of a number of issues when planning a VoIP over wireless (often called VoW, VoFi, or wVoIP) deployment. With the advent of WiMAX for longer range Wi-Fi wireless communications, phone companies (cellular carriers) gearing up to offer hybrid phones that will use VoIP over Wi-Fi when a Wi-Fi network is available and switch to cellular when one is not. So VoIP over wireless encompasses different things, depending on the context.

Here are some things everyone need to know about VoIP:

I: Wireless VoIP offers advantages over cellular service

A big advantage of wireless VoIP is that IP phones that work on Wi-Fi networks can be used in place of cell phones in many cases. Public 802.II hotspots are often free or available at a low daily cost. If we're connecting to the Wi-Fi network anyway for Web and e-mail access, there's no additional cost to make VoIP calls other than the cost of our VoIP service, which is

usually far less than the cost of cell phone service and may offer free unlimited international calling, something we don't get with most cellular plans.

2: VoIP over wireless LAN has many

VoIP over a wireless LAN can provide easy internal calling for corporations, educational campuses, hospitals, hotels,

government buildings, and multipletenant units such as dorms, with the ability to roam freely and advanced calling features such as voicemail and caller ID. Users can also use the

LAN's Internet connection and an account with a VoIP provider to make calls outside the site, including domestic long distance and international calls, often at no extra charge.

3: WiMAX extends the reach of VoIP WiMAX is a long range microwavebased wireless technology based on the 802.16 standards. It can provide wireless broadband coverage to an entire metropolitan area or a large rural area. since WiMAX transmissions can span up to 75 miles). With kilometers (46 theoretical throughputs of up to 288 Mbps and practical throughput up to 70 Mbps, WiMAX has the bandwidth to support VoIP.

4: Voice transmission is more sensitive than data transmission

VoIP is a real-time application, making it particularly sensitive to packet loss that can be caused in a wireless network by weak signals, range limitations, and interference from other devices that use the same frequency. To support VoIP, our wireless network must be reliable because users expect more dependability from their phone systems than from their computers. They expect a dial tone every time, no dropped calls, and high voice quality.

5: Mixing VoIP and data can degrade call quality

Because of the sensitivity of VoIP applications to any disruption or delay, competing with data transmissions on the same wireless network can cause degradation of voice quality. It's important to implement quality of service (QoS) features to ensure that VoIP packets get priority.

6: Security is a bigger concern over wireless

Security is already a major concern for VoIP, as sending telephone calls over a public IP network presents more security risks than using the proprietary —closedl networks of the telcos. Wireless adds another layer of security concerns, with transmissions going over the airwaves instead of cables and thus subject to easier interception. Common VoIP

protocols such as SIP have their own security vulnerabilities.

Any Wi-Fi network that will carry VoIP traffic must be secured, and such traffic should always be protected by authentication and encryption.

On the other hand, many of today's telephone calls already travel over the airwaves, on cellular phones.

7: Older wireless LAN equipment isn't ready for VoIP

If our plan is to roll out VoIP over your existing data Wi-Fi network, we may be in for a disappointment. For good performance, especially in the enterprise space, we need wireless LAN hardware and software specifically designed to work with traffic the voice and address prioritization and security issues.

Look for integrated support for SIP and policy-based management that allows us to block unauthorized voice traffic.

8: Wireless VoIP equipment - availability

Many popular vendors of consumer-level networking equipment (LinkSys, D-Link, Netgear) now make IP phones that work with their wireless routers. For example, D-Link's DPH-540 IP phone supports all SIP-based VoIP providers and works with 802.IIb or g Wi-Fi networks. It supports WEP, WPA, and WPA2 encryption.

At the same time, vendors of enterprise-level hardware, such as Cisco, are offering IP phones that work with IP PBX systems. For example, Cisco's Unified Wireless IP phone 7920 works with the Cisco Unified Communications Manager and supports EAP-FAST authentication for increased security.

9: VoIP over wireless smart phones can save companies money

Today, many business people carry smart phones or handheld computer phones that run the Windows Mobile operating system, such as the Samsung i730 and Treo. These phones are provided by cell phone carriers, and using the telephone capability costs precious minutes. International calls call extra.

However, by installing Skype for Mobile on these devices, users can make free or very low cost phone calls while bypassing the cellular plan and using the phone's Internet connection or in the case of Wi-Fi enabled

devices, like the Samsung, using a wireless hotspot.

10: Future phones will combine cellular and Wi-Fi VoIP

Industry pundits predict that the next generation of cell phones will all include built-in Wi-Fi. With these hybrid or dual-mode phones, we'll be able to seamlessly switch between cellular and VoIP over Wi-Fi when we come into range of a Wi-Fi hotspot, even within the same phone call.

Landlines are expected to all but disappear as the hybrid phones become a single solution for telephony, operating off the user's Wi-Fi network at home and using cellular technology when there is no Wi-Fi network within range.

This is predicted to lower the total cost of telephone service.

Veena.R 3rd IT

DO U KNOW...?

- Billgates receives highest number of E-Mails/day with an average of 40,000mails/day
- 250 men work for reading & organizing these mails daily
- Microsoft is in 91 countries with more than 90,000 employees
- An amount of 20 billion rupee is used as fund for developing new software
- Windows steals many ideas from APPLE MACINTOSH till now

K.SHANMUGANATHAN

FINAL IT

GOOGLE CHROME-OS

With the advent of Windows 7, many users have been scrambling to compare the OS to Apple's leading product, OS X Snow Leopard. However, in the midst of the competition concerning the two products, Google's new Chrome OS has been relatively ignored. Even so, this new player in the market may very well follow the same path as the netbook itself, the platform that Google is aiming for with the Chrome OS, set to be finished and released in the second half of 2010.



In the wake of the battle between Apple and Microsoft, what exactly is Google's Chrome OS? It's a new, lightweight, open source OS produced by Google which is almost entirely dependent on the cloud, to the point where the entire OS is composed of almost nothing but the Chrome browser. Instead of attempting to produce a fully fledged OS,Google and the free software

community are working to produce an OS that focuses on being as lightweight as possible, yet can handle all of the basic needs of the average user, relying on the growing success of web applications such as You Tube, Facebook, Gmail, and much more.

It's already been shown that convenience, simplicity, and instant access can easily trump alternatives in the computer industry, demonstrated by the striking popularity of the smartphone, netbook, etc. This is where Chrome OS shines and where Windows 7 and Snow Leopard do not: providing a cheap, small, fast alternative to Windows 7 and Snow Leopard, potentially even overcoming the two with an always-on, lasting, secure, and cheap computer that is more than capable of handling quick computer tasks.

Google's status as a major player in the market, all the way from a basic search engine to a powerful threat to Microsoft and its Windows products, while also helping to spread the success and familiarity of the Linux kernel that the Google Chrome OS is based on.

K.SHANMUGANATHAN
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PUZZLE 02:

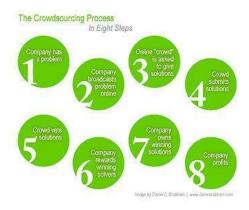
How can you throw a ball as hard as you can and have it come back to you, even if it doesn't bounce off anything? There is nothing attached to it, and no one else catches or throws it back to you? Ans: Pg 26

CROWD SOURCING

Crowd ourcing distributed is problem-solving and production model. Problems are broadcast to an unknown group of solvers in the form of an open call for solutions. Users also known as the crowd—typically form into online communities, and the crowd submits solutions. The crowd also sorts through the solutions, finding the best ones. These best solutions are then owned by the entity that broadcast the problem in the first place—the crowdsourcer—and the winning individuals in the crowd are sometimes rewarded. The difference between crowdsourcing and ordinary outsourcing is that a task or problem is outsourced to an undefined public rather than a specific other body. The difference between crowdsourcing and open source is that open source production is a cooperative activity initiated and voluntarily undertaken by members of the public. crowdsourcing the activity is initiated by a client and the work may be undertaken on an individual, as well as a group, basis

For instance the —UTEST BUG BATTLEII, is a quarterly software testing competition, where thousands of software testers from around the world compete to find bugs in today's most popular web, mobile, desktop and gaming applications. The company's Ist Bug Battle in which 1,331 software testers participated reported more than 700 bugs in Google Chrome, Internet Explorer and Mozilla Firefox. In the 2nd Bug

Battle(Mar,2009) I,II9 software testers participated and found bugs in Facebook, MySpace and LinkedIn. Twitter applications were the subject of the third Bug Battle and



nearly \$4,000 prize money was awarded to those reporting best bugs and best feedback.

uTest's business model is based on the idea that crowdsourcing is better suited to web and mobile app testing than other outsourcing models.



V.PRIYADHARSHINI 2nd IT

MOBILE THEFT SOFTWARES

- Wave secure
- Mobile Tracker
- Guardian

K.SHANMUGANATHAN FINAL IT

INFOQUEST 12

Open source techniques

Most of those apps will be built on open source software, a phenomenon responsible for the web's explosive growth in the past 15 years. There is a historic precedent here: while the term "open source" was coined in the late 1990s, the concept of sharing valuable information to

Wonders of 9

- Subtract a number with the reverse of the same number (except the number with same digits say 999 or like 323)
- Add the numbers in the result and see the wonder.
- Try for any number. Ex: 321 123 ____(-) 198

Kesavan P Final IT

catalyze an industry existed long before the Internet. In the early 1900s, the U.S. automobile industry instituted a cross-licensing agreement whereby patents were shared openly and freely amongst manufacturers. Prior to this agreement, the owners of the patent for the two-cycle gasoline engine had effectively bottled up the industry. Today's open source goes far beyond the "patent pooling" of the early auto manufacturers, and has led to the development of the sophisticated software components — Linux, Apache, SSH, and others

Linux, Apache, SSH, and othersupon which Google is built.

We are the largest open source contributor in the world, contributing over 800 projects that total over 20 million lines of code to open source, with four projects (Chrome, Android, Chrome OS, and Google Web Toolkit) of over a million lines of code each.

We have teams that work to support Mozilla and Apache, and an open source project hosting service, which hosts over 2,50,000 projects.

Open Source Education

The Open Source Initiative (OSI) actively promotes open source software by educating developers, decision makers, and users about the advantages of open source software and collaboration techniques. As part of the OSI's mandate on education, board members present about open source technologies, collaboration and community at conferences and seminars across the world.

Abiword: A Lean Word-processing Machine

I like my tools to be efficient. Part of efficiency is opening quickly, not sucking up all of my systems' resources, and saving in various formats. When considering office needs one of the first tools that pops into my mind is word processing.

Naturally the masses will first turn to either MS Office or Open Office.

Are you looking for a free lightweight alternative to Microsoft Word and Open Office? Are you sick of endless loading times and office suits that occupy hundreds of megabytes of space on your hard drive?

AbiWord might be worth a closer look if you answered those questions with yes. What's so different about AbiWord that I would recommend it?

There are several reasons,

- First it is only about five megabytes in size which is a good prerequisite for a fast loading application.
- AbiWord is open source and available on many platforms including Microsoft Windows, Linux, Mac OS, Free BSD and others.
- The open source tool is able to read and write all important formats like Microsoft Word, Open Office, Word Perfect, Rich Text, web documents and more.
- This is ideal if you want to import files from different sources and work with them at.
- Plug-in enhance the functionality tremendously, there are currently more than 50 free plug-in and a tool available as additional downloads from the AbiWord website

What Makes AbiWord Different?

AbiWord is unique among word processors in its drive to become a fully cross-platform word processor. Our source code is carefully written so that AbiWord will run on virtually any operating system with a minimum of time spent on porting. This combined with our support for internationalization (the ability to run AbiWord in many languages) gives AbiWord a massive potential user-base.

HOW TO HIDE TEXT IN NOTE PAD

- Open your command prompt start -> Run type cmd
- Move to any destination for example let us assume D:\>drive
- Type the below code in your command prompt
- ♣ D:\>notepad tothetech.txt:hidden
- A notepad window will be opened and asking do you
- want to create new text file,click yes
- Write some data and save the file
- Move to D:\>and open tothetech.txt you can not see no data in the file tothetech.txt
- To retrieve the hidden data open command prompt and type the same command
- D:\>notepad tothetech.txt:hidden

Notepad will open tothttech.txt file with hidden data

B.SASIKUMAR FINALIT

Supported Platforms

AbiWord is a multi-platform application, meaning that it was designed to work well on multiple types of computers and operating systems.

- Windows NT (Windows XP, Vista,).
- -Mac OS.
- Linux.
- UNIX.

MYSQL: Fed up with the world of commercial software licensing? Are you looking for a stable database platform for your organization but sweating at the hefty price tags attached to mainstream products from Microsoft and Oracle? MySQL may be for you!

Puzzle 03:

I just found a number with an interesting property:

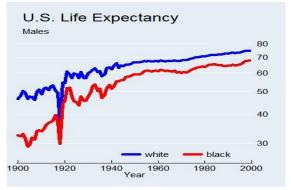
When I divide it by 2, the remainder is 1. When I divide it by 3, the remainder is 2. When I divide it by 4, the remainder is 3. When I divide it by 5, the remainder is 4. When I divide it by 6, the remainder is 5. When I divide it by 7, the remainder is 6. When I divide it by 8, the remainder is 7. When I divide it by 9, the remainder is 8. When I divide it by 10, the remainder is 9.

It's not a small number, but it's not really big, either.

When I looked for a smaller number with this property I couldn't find one.

Can you find it? Ans: Pg 26

Once the refuge of geeky hackers, MySQL is now a well-respected product that is more than capable of commercial operation. In fact, the entire Google search engine is built upon MySQL technology! The new arrival is Firebird Database (PostgreSQL+MySQL).



STATA is a complete, integrated statistical package that provides

everything you need for data analysis, data management, and graphics. Stata is not sold in pieces, which means you get everything you need in one package without annual license fees.

SYSTAT is a powerful statistics package that has every statistical procedure you need to carry out efficient statistical analysis of your data. With SYSTAT, analyzing and presenting environmental data requires less effort than with a business orientated statistical software system.

ILAYARAJA.N FINAL IT

E Waste

Definition of e-waste : Electronic waste, popularly known as

<u>e-waste</u> can be defined as electronic equipments / products connects with power plug, batteries which have become obsolete due to: advancement in technology changes in fashion, style and status nearing the end of their useful life.

Classification of e-waste: E-waste encompasses ever growing range of obsolete electronic devices such as computers, servers, main frames, monitors, TVs & display devices, telecommunication devices such as cellular phones & pagers, calculators, audio and video devices, printers, scanners, copiers and fax machines besides refrigerators, air conditioners, washing machines, and microwave ovens, e-waste also covers recording devices such DVDs, as floppies, tapes, printing cartridges, military electronic waste, automobile electronic catalytic converters, components such chips, processors, mother boards, printed circuit boards, industrial electronics sensors, alarms. sirens. automobile security devices. electronic devices.



Indian Scenario: There is an estimate that the total obsolete computers originating from government offices, business houses, INFOQUEST

industries and household is of the order of 2 million nos. Manufactures and assemblers in a single calendar year, estimated to produce around 1200 tons of electronic scrap. It should be noted that obsolence rate of personal computers (PC) is one in every two years. The consumers find it convenient to buy a new computer rather than upgrade the old one due the changing configuration, technology and the attractive offers of the manufacturers. Due to the lack of governmental legislations on e-waste, standards for disposal, proper mechanism for handling these toxic hi-tech products, mostly end up in landfills or partly recycled in a unhygienic conditions and partly thrown into Computer waste is generated from individual households; government, public and private sectors; computer retailers; manufacturers; foreign embassies; secondary markets of old PCs. Of these, the biggest source of PC scrap are foreign countries that export huge computer waste in the form of reusable components.

Electronic waste or e-waste is one of the rapidly growing environmental problems of the world. In India, the electronic waste management assumes greater significance not only due to the generation of our own waste but also dumping of e-waste particularly computer waste from the developed countries.

With extensively using computers and electronic equipments and people dumping old electronic goods for new ones, the amount of E-

Waste generated has been steadily increasing. At present Bangalore alone generates about 8000 tonnes of computer waste annually and in the absence of proper disposal, they find their way to scrap dealers.

E-Parisaraa, an eco-friendly recycling unit on the outskirts of Bangalore which is located in Dobaspet industrial area, about 45 Km north of Bangalore, makes full use of E-

Waste. The plant which is India's first scientific e-waste recycling unit will reduce pollution, landfill waste and recover valuable metals, plastics & glass from waste in an eco-friendly manner. E-Parisaraa has developed a circuit to extend the life of tube lights. The circuit helps to extend the life of fluorescent tubes by more than 2000 hours. If the circuits are used, tube lights can work on lower voltages. The initiative is to aim at reducing the accumulation of used discarded electronic and electrical equipments.



India as a developing country needs simpler, low cost technology keeping in view of maximum resource

FIND THE DAY?

The day before yesterday I was 25 and the next year I will be 28. This is true only one day in a year. What day is my birthday?

Ans: Pg 24

recovery in an environmental friendly methodologies. E-Parisaraa, deals with practical aspect of e-waste processing as mentioned below by hand. Phosphor affects the display resolution and luminance of the images that is seen in the monitor.

E-Parisaraa's Director Mr. Р. Parthasarathy, an IIT Madras graduate, and a former consultant for a similar e-waste recycling unit in Singapore, has developed an ecofriendly methodology for reusing, recycling and recovery of metals, glass plastics with & methods The incineration hazardous materials are segregated separately and send for secure land fill for ex.: phosphor coating, LED's, mercury etc.

We have the technology to recycle most of the e-waste and only less than one per cent of this will be regarded as waste, which can go into secure landfill planned in the vicinity by the HAWA project.

SONA SWATHY R G SECOND IT

FUTURE TRENDS IN INFORMATION TECHNOLOGY

- I. Computation moves into the cloud obvious but important. This is the key to the future which will provoke massive social change. No longer will we be tied to our desks or fortified corporate networks. Work anywhere on any device with the same access to all the same resources.
- 2. Technology is humanised forget —plug and prayll, it just works. Long promised, rarely delivered. This is when technology is liberated from the geeks into the hands of the masses. Compatibility will be a thing of the past once computers all speak a common set of standard languages.
- 3. Interfaces are revolutionised keyboards and mice will seem quaint. Touch, eye, voice and possibly even brain controllers will be commonplace. If you think the iPhone is cool you haven't seen anything yet. Understanding semantic context will make manipulating complex data childs play.
- Connectivity is ubiquitous –
 the internet is everywhere.
 Not just on your computer or
 mobile ~ it will be woven
 into the very fabric of

everyday life as an essential additional layer connecting everything to everyone and visa versa. Blanket high-speed wireless connections will exist across all major cities.



- 5. Personalisation gets personal

 whether you are in the real
 world or the virtual world
 your social connections,
 interests and history (etc) will
 follow you everywhere you go.
 The flow of information will
 be automatically targeted and
 fine tuned around this. You
 control who sees What
 /where /when.
- 6. Language barriers are broken
 English is only the 4th most spoken language in the world.
 Through real-time machine translation you now speak and understand the rest. The volume of information you have at available will drastically increase through this. Small businesses can now operate globally.
- 7. Information overload & dependency faced with more information that you could possibly imagine people

- will face new challenges of how to cope. Some will thrive in this new sea of unlimited potential while other will face serious mental collapse. There will be those who choose to disconnect entirely.
- 8. Viruses are no more with the majority of software provided as a service (SaaS) viruses which plagued Windows users will be a thing of the past. However, new even more dangerous and sophisticated threats will emerge with personal data stored in the cloud a prime target.
- 9. Social homogenisation spurred on by technology, globalisation take an every stronger hold on social norms. It becomes a cognitive and social culture, not a geographic one, which relies heavily on the notion of information andknowledge exchange in a complex web of relationships.



10. Man-machine distinction blurs – the line between humans and machines begins to lessen. Old concepts of pre-net existence will seem foreign to our children who will liken the change to the Age of Enlightenment when mankind made a seismic shift in the way we live and ultimately exist.

> AKILA S SECOND IT

CAN YOU FIND THIS?



Its a hard disk at 1956....The Volume and Size of 5MB memory storage in 1956.In September 1956 IBM launched the 305 RAMAC, the first computer with a hard disk drive (HDD).The HDD weighed over a ton and stored 5MB of data. Let us start appreciating your 4 GB 'Pen drive'

Awareness about social websites

Awareness about social websites, guess who am I?

Nikhil was so stressed off because his dad died a month ago. He was lying in his bed and was wondering whether to go to college or not, he had a

call at that time after his dads death he forgot all about his college, his friends and again he was in no mood to attend the call. He skipped all his friends' calls like this.

But this was different, a long and continuous ring, this time

Nikhil was damn sure that it's an important call. He rolled towards the phone, picked up the receiver and said hello in a more silent way. His depression was clearly felt in his voice.

Hello!!!

Nikhil was shocked to hear a sweet girls voice on the other side, he was dramatizing his thoughts to a greater extend and letting his thought wide spread of imagining who she was?

He could just have asked her but he was shocked and depressed to step up his next words.

—Hello!! Hello!! Nikhil is this you? II, She knows my name; she

knows my name, a simple smile, Nikhil shared after a long time.

Yes, nikhil's on the line. May I know who this is?

I am geetha of bangalore doing my b.sc I just saw yourprofile in orkut and I saw that you have posted your number, so I just called to say hi.you got a great profile, I enjoyed it. You are doing your b.lit rite?

Rite?

Nikhil, I got to hurry up for college now, I just called to say hi, shall we talk in evening? Ya.okay.sure.bye.Thats all he could speak up at that time. Bye.



At a time like this, her voice made him feel great, he wasn't depressed at all and suddenly he wanted to go to college now.

So he just left.nikhil's uncle was taking care of family now and he was not in a mood to see Nikhil sitting idle always. He even wanted to give some responsibility to get him up; he

gave two units from his dad's factory to him. But Nikhil never felt happy.

But when his uncle saw Nikhil back to go to college he was very much delighted. But in the mean time Nikhil was dreaming about how she would be looking? Why she got impressed by my profile? Or maybe if my friends was just playing with me? A bunch of questions exploded out from his head, but she made a promise to call him back so he was settled with an idea.

Evening he was eagerly waiting for her call, but till the clock strike nine there was no sound. He decided to call her but there was no response from her. He was pretty much sure that this might be a prank call. And he was thinking how silly of him to react to an anonymous call like that.

Puzzle 04:

In the word ORGANISATIONAL, if the first and second, third and forth, forth and fifth, fifth and sixth words are interchanged up to the last letter, what would be the tenth letter from right? Ans: Pg 26

It's been two days he had that call, he was still wondering who it was? But he was relieved from his depression because he had a change of mind, Which is what uncle was saying from the beginning.

—Helloll, he responded to the call, —sorry.sorry.i had my cycle test for the past two days.

Sorryll, said the voice .Nikhil forgot all his madness and replied her cooly, —its okay.it happensll.

And then they both started to talk and talk and talk.....

They became really close within a week. Nikhil would even forget to say hi to his uncle in morning. But he wouldn't forget to transfers all his movements to her. She would also call him all day. They talk about everything from their social life to personal life in the name of being —openII.



Soon geetha knew everything about Nikhil from his pluses to his minuses.nikhil was very happy that he found a true friend for him, the one who will stick up to the end.

After a month or so, nikhils uncle gave him a debit card and asked him to drop their workers salary in a common account from which the cashier will drop money and distribute the salary.

Nikhil wanted to do this job first so he asked geetha to wait till he finishes the work.

But geetha insisted him to wait, —please Nikhil wait! Wait 2 minutes. You will receive a mail now it consists of link; me and my classmates did this as a project. You can transfer money to any bank. It is really working, please try itll.

—The link will be incomplete but don't worry; the other things are in construction this is like a bête site. You don't worry about it just click it. II —Why all these fuzz geetha I will do it in a way usually I do. II

—You won't trust me, won't help me ah? It will give me marks. Please.ll

—Why asking please and all stupid I will do it right nowll, he made the click and entered his pin number password, account number and made transaction.

Now happy ah? It's very simple, no matter to me.llokay.good night dearll,geetha had replied,—before that her

next cycle test is coming so I can't replyll.



After two days, his uncle reminded him to make transaction since the salary day was tommorrow.he don't know what to do, he wanted to ask her but it was her test time and he don't wanted to disturb her.

He thought that her project might have got failed .so he went to the bank web-site and to make a correct transaction now.

But to his very shock 15 lakhs was dropped from his account on the same date when he tried her link. He was confused and more depressed than ever. He called her many times but couldn't reach her. He doesn't know how to convey this to his uncle. But he had too. so he explained the full story to him. He was disappointed but at the same time confused of what just happened,

They made a complaint to the police and the police called for cyber-crime investigation to help out this matter. They came, enquired and explained

in full details, what we have seen is a new phase of hacking, it is called social engineering. The fakes create a fake profile for themselves and look for weakest link in social web sites. If our guess is right and

Nikhil's information is right, his comment —I miss my dad a lot only made him —the weakest linkll. And for the first two days she didn't reply rite? thats because she and her group must be gathering details about you to check whether their attempt is worth trying, after that she interacted with you a lot so that she could gain your trust. Instead of great codes to hack your system, this method of gathering and details is called —shingll.After that when she knew it was the right time, she made you give personal details to an untrusted vendor by making you put the trust on her. After that she looted click-jacked and the and made that password transaction available to her. Clickjack is hacking your click to a place where they need it. The hacked your click to their transaction and not yours. They did a clear and planned operation, couldn't track them down. All were fake id's, false IP's, if it was a normal hacking we would have got traces but mostly you shared it in phone, its difficult.

Press *#06# in your mobile.IMEI followed by 15 digit will appear. In that, check 7th and 8th digit. If it is,

- 02 or 20 means cellphone parts assembled in Emirates-Bad Quality
- 4 08 or 80 meansfair quality.
- 4 01 or 10 means mobile from Finland-very bad quality.
- 00 means original and best mobile quality assembled in Azerbaijan-bad quality and dangerous for health.

B.SASIKUMAR FINAL IT

THEY DIDN'T HACK IN
TO YOUR SYSTEM BUT
THEY HACKED INTO
YOU (USER-THE
WEAKEST LINK WITH
NO FIREWALL, NO
SECURITY).

BE AWARE OF SOCIAL ENGINEERING.

MAKE YOUR
PERSONAL THINGS
"PERSONAL".
DON'T TRUST OTHERS.

A.NAVEEN ROSARIO SECOND IT

Most Famous Hackers of All Time

Black Hat Crackers

Jonathan James: James gained notoriety when he became the first juvenile to be sent to prison for hacking. He was sentenced at 16 years old. In an anonymous PBS interview, he professes, "I was just looking around, playing around. What was fun for me was a challenge to see what I could pull off."major intrusions targeted high-profile organizations. He installed a

backdoor into a Defense Threat Reduction Agency server. The <u>DTRA</u> is an agency of the Department of Defense charged with reducing the threat to the U.S. and its allies from nuclear, biological, chemical, conventional and special weapons. The backdoor he created enabled him to view sensitive emails and capture employee usernames and passwords.

Adrian Lamo: Lamo's claim to fame is his break-ins at major organizations

Ans: Find the day:

He was born on December 31st and spoke about it on January 1st.

like The New York Times and Microsoft. Dubbed the "homeless hacker," he used restitution. He was also sentenced to six months of home confinement and two years of probation, which expired January 16, 2007. Lamo is currently working as anaward-winning journalist and public speaker.



Kevin Mitnick: A self-proclaimed "hacker poster boy," Mitnick went through a highly publicized pursuit by authorities. His mischief was hyped by the media but his actual offenses may be less notable than his notoriety suggests. The Department of Justice describes him as "the most wanted computer criminal in United States history." His exploits were detailed in two movies: Freedom Downtime and Takedown.

Kevin Poulsen: Also known as Dark Dante, <u>Poulsen</u> gained recognition for his hack of LA radio's KIIS-FM phone lines, which earned him a brand new Porsche, among other items. Law enforcement dubbed him "the Hannibal Lecter of computer crime."

Authorities began to pursue Poulsen after he hacked into a federal investigation database. During this pursuit, he further drew the ire of the FBI by hacking into federal computers for wiretap information.

His hacking specialty, however, revolved around <u>telephones</u>. Poulsen's White Hat Hackers

Tim Berners-Lee: Berners-Lee is famed as the inventor of the World Wide Web, the system that we use to access sites, documents and files on the Internet. He has received numerous recognitions, most notably the Millennium Technology Prize.

While a student at Oxford University, Berners-Lee was caught hacking access with a friend and subsequently banned from University computers. w3.org reports, "Whilst [at Oxford], he built his first computer with a soldering iron, TTL gates, an M6800 processor and an old television." Technological innovation seems to have run in his genes, as Berners-Lee's parents were mathematicians who worked on the Manchester Mark I, one of the earliest electronic computers.

While working with CERN, a European nuclear research organization, Berners-Lee created a hypertext prototype system that

most famous hack, KIIS-FM, was accomplished by taking over all of the station's phone lines. In a related <u>feat</u>, Poulsen also "reactivated old Yellow Page escort telephone numbers for an acquaintance who then ran a virtual escort agency." Later, when his photo came up on the show Unsolved Mysteries, I-800 phone lines for the program crashed. Ultimately, Poulsen was captured in a supermarket and served a sentence of five years.

Since serving time, Poulsen has worked as a journalist. He is now a senior editor for Wired News. helped researchers share and update information easily. He later realized that hypertext could be joined with the Internet. Berners-Lee recounts how he put them together: "I just had to take the hypertext idea and connect it to the TCP and DNS ideas and — ta-da! — the World Wide Web."

Since his creation of the World Wide Web, Berners-Lee founded the World Wide Web Consortium at MIT. The W3C describes itself "an as international consortium where Member organizations, a full-time staff and the public work together to develop Web standards." Berners-Lee's World Wide Web idea, as well as standards from the W3C, is distributed freely with no patent or royalties due.

Linus Torvalds: <u>Torvalds</u> fathered Linux, the very popular Unix-based operating system. He calls himself "an engineer," and has said that his aspirations are simple, "I just want to have fun making the best damn operating system I can."



Torvalds got his start in computers with a Commodore VIC-20, an 8-bit home computer. He then moved on to a Sinclair QL. Wikipedia reports that he modified the Sinclair "extensively, especially its operating system." Specifically, Torvalds hacks included "an assembler and a text editor...as well as a few games."

Torvalds created the Linux kernel in 1991, using the Minix operating system as inspiration. He started with a task switcher in Intel 80386 assembly and a terminal driver. After that, he put out a call for others to contribute code, which they did. Currently, only about 2 percent of the current Linux kernel is written by Torvalds himself. The success of this public invitation to contribute code for Linux is touted as one of the most prominent examples of free/open source software.

Currently, Torvalds serves as the Linux ringleader, coordinating the code that volunteer programmers contribute to the kernel. He has had an asteroid named after him and received honorary doctorates from Stockholm University and University

of Helsinki. He was also featured in Time Magazine's 60 YEARS OF HEROS.

> G.PAVITHRAN SECOND IT

INFO TODAY:

- 1.What programming language is GOOGLE developed in? AJAX(Asynchronous Java script Xml)
- 2. Which software is used to measure the speed of cricket ball?

HAWK EYE

- 3.Do you know the secret name of windows? PROJECT CHICAGO
- 4. Who is the father of Pentium processors?

VINOTH RAM(an INDIAN scientist)

5. Who is the founder of Wikipedia?

JIMMY WALES.

MATHEMATICAL MIRACLE:

111 / 1 + 1 + 1 = 37 222 / 2 + 2 + 2 = 37 333 / 3 + 3 + 3 = 37 444 / 4 + 4 + 4 = 37 555 / 5 + 5 + 5 = 37 666 / 6 + 6 + 6 = 37

777 / 7 + 7 + 7 = 37

888 / 8 + 8 + 8 = 37999 / 9 + 9 + 9 = 37

> 01. 20 02. The ball is thrown upwards 03.2519 04.1 (ROANISATIONALG)

> > Answers for the Puzzles:

```
In plant training
   ☐ Thalapathi & Co. Flex
              R.Dinesh Kumar (M07IT61)
   ☐ Bharat Sanchar Nigam Ltd.
              C.Arularasi (M07IT04)
              M.Meenakshi (M07IT25)
              R. Veena (M07IT51)
              R.Jayalakshmi (M07IT14)
              S.Karthick (M07IT18)
   ☐ KG Information Systems Private Limited
              S.Kavitha (M07IT20)
              K.Deepa (M07IT06)
              S.Divyasri (M07IT08)
              G.Akilandasowmya (M07IT01)
              R.Arunadevi (M07IT05)

☐ Kandk InfoTech

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              K.Deepa (M07IT06)
              S.Divyasri (M07IT08)
              G.Akilandasowmya (M07IT01)
              A.Deepika (M07IT07)
   ☐ L.G.Balakrishnan & Bros ltd. Rolled steel products Division
              G.Akilandasowmya (M07IT01)
   □ Racyweb Solutions
              P.Indhusha (M07IT13)
              B.Saranya (M07IT39)
              A.Deepika (M07IT07)
Guest Lectures
       Engineering Optimization Methods & Image Denoising Methods by Dr.T.Arul Doss Albert Victoire, Dr.V.R.Vijaya Kumar (19.6.09)
       Bisdon Inauguration (12-08-09)
       Java Technology by
       Mr.M.Subramanian,
       Chief Administrator.
       NDA Foundation. (12-08-09)
       Wireless Technology by
       Mr.P.T.Prabhu
       Sansari Technologies, New
                                         Delhi
       and Mr.R.Nirmal Krishnan
                                         Engineering
       National
                        Electrical
       Components, Coimbatore (28-08-09)
       Overview of C# Dot Net by Mr.S.Kannan & Mr.K.Prasad, NIIT, Coimbatore (03-09-09)
```

INFOQUEST 27

Stepping into Open Source Systems by

Ms.M.Hemasree

Senior Manager-Corporate Marketing and Deliverables, Indian Institute of Software testing, Coimbatore (11-09-09)

Workshop

MATLAB and LABVIEW in Dr.Mahalingam College of Engineering and Technology

G.Akilandasowmiya, B.Saranya, D.Neeraja, R.Nandhini,

R.Jayalakshmi, P.Karpagam, S.M.Saranya, R.Ramya,

R.Arunadevi, S.Divyashri, K.Deepa, M.Poomalai, C.Arularasi

PRIZE WINNERS

Paper Presentation

T.Ezhil Arasu& A.Ezhil Arasu, III B.Tech IT

"RFID Based Theft Detection (1St Prize) in

Sri Krishna College Of Engineering and technology.

Web Designing

N.Saravana ganesh(M06IT40), (1st Prize) in Bannari Amman Institute of Technology

Online gaming

S.Suresh(M07IT50),III B.Tech IT (1st Prize) in Sri Krishna College of Engineering and Technology

K.Shanmuganathan M06IT47& G.Naveen PrabhuM06IT28

IV B.Tech IT,(1st Prize) in Sasurie College of Engineering & Technology

Quiz

K.Shanmuganathan(M06IT47)&K.S.GowthamM06IT12,

IV B.Tech IT, (2nd prize) in Institute of Road

& Transport Technology

Sports

R.Sathish

C.Thianeswaran

C.Saravanan

Anna University Zone-7 Intercollegiate cricket Tournament,

MPNMJ College of Engineering, Chennimalai

PARTICIPANTS

Paper Presentation

- B.Sasikumar &P.Kesavan (IV B.Tech IT) Brain computer interface Mepco Schelenk Engineering College
- P.Pavithra & M.Malarvizhi (IV B.Tech
 IT), 4G Technology Sengunthar
 Engineering College

M.Kalaiselvi & P.Bharathi (IV B.Tech IT),

Fraud detection in credit card transaction using DC-1 Algorithm Sengunthar Engineering College

P.Sathesh (III B.Tech IT)

Image processing -Reconstruction of mechanically recorded sound Gnanamani College of Engineering

Workshops

- V.Karthik (III B.Tech IT) 3D-Evolution CEG.
- H.Nagarajan (III B.Tech IT) Excitement of Research IIIT.

Marketing

K.Shanmuganathan M06IT47 (IV B.Tech IT)

G.Naveen Kumar M06IT27 (IV B.Tech IT)

G.Naveen PrabhuM06IT28 (IV B.Tech IT)

Institute of Road & Transport Technology

Programming contest and poster design

T.Ezhilarasu (III B.TechIT)

ISTE Students national Convention (09)

Bannari Amman Institute of Technology.

Sports

Anna University inter zone cricket tournament

R.Sathish

C.Thianeswaran

IV B.Tech IT

SSN college of engineering, Chennai

EXTRA CURRICULAR ACTIVITES

Vegetable carving

K.Deepa, M.Meenakshi (III B.Tech IT)
 prize
 DR.M.C.E.T.

Cookery

 K.Deepa, M.Meenakshi (III B.Tech IT) 2 nd prize DR.M.C.E.T.

Arunadevi.R of Third IT has been selected as the student ambassador of EMC².

INFOQUEST 29

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Ms.M.SRI RADHAI, LECTURER/IT

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