Odd Semester Release - 2010

an activity of department association

InfoquesT

Elixir of Technology

version 3.0

Grab Inside .. ..

SparX - 2010

a round up

- an existence of proof of a subtle offensive weapon
- first sensor to directly measure speed uses algorithm from Fruit - fly circuits

xtra cover .. ..

- placement season ' 10
- students acheivements

- a new gigantic array of innovative technology
- capacitive sensing technology

Grab Inside .. ..

Stuxnet

Content

MESSAGE

Message from Prof.C.Ramaswamy M.E., F.I.V Secretary

The publication of a magazine symbolize that an institute is moving towards mellowness. An in-house magazine provides a forum to potential writers to develop their thinking and writing power. A number of famous writers started their early publications in collage/university magazine.

The students of MCET have come out with their 3rd magazine namely "INFOQUEST" which contains useful articles and other interesting features. The magazine projects the numerous social events taking place in MCET to provide students opportunities to show their talents. The long and strenuous efforts made by the editorial team members must be appreciated.

Message from Dr.S.Vijayarangan Director (Academic)

I wonder the IT students are going to release the third issue of “INFOQUEST” which is enriched with budding IT technologies. This activity depicts the student’s involvement and their thirst of knowledge.

“*Ability is nothing without opportunity*” as a quote says MCET giving the opportunity to reveal the wisdom of the students via releasing such an esteemed magazine “INFOQUEST” - third issue for this academic year 2010. I am sure that each and every page in this magazine provides the ocean of knowledge to the readers. I hope the editorial team members to attain a grand success in the walk of propagating their perception.

Message from Dr.S.Chenthur Pandian Principal

I am very pleased to note that Information Technology department students are coming up with their innovation in the form of magazine (INFOQUEST). Letting the new trends in the IT field reaching the students in form of a magazine is much appreciable. I wish them all success in their journey ahead.

Message from Dr.S.Ramakrishnan Professor & HOD

As we begin our first publication of 2009, it is our turn to introduce something new in our third issue of an “INFOQUEST”. I am thankful for our wonderful readers, our talented writers, and our generous management gave the opportunity to release the two successful magazines in our department. Our IT students bought technical treasures of their IT and surprising insights in this issue. We hope this issue provides the fulfillment to the thirsty readers. I am inspired by the energy of my students and their commitment to the work. I hope this magazine encapsulated with interesting and informative articles.

From Editorial Desk.....

"Applaud us when we run, console us when we fall, cheer us when we recover"

The thirst for releasing the 3rd edition of the INFOQUEST came from our department faculties and we have tried to make it the best.

The third issue of INFOQUEST contains remarkable articles on various technologies and softwares .The magazine also has news on the emerging technologies and new trends .It has also opened for an interesting article on solutions to interactive consumer components. A prospect of highly updated article on personal computing and telepresence is also present.

A glimpse of various achievements of the students of IT department in both intra and inter college meets has also been included. Fasten your seat belts and get ready for the exciting experience.

We congratulate the students whose articles have been published for their excellent effort and timely cooperation

DR MAHALINGAM MCET
COLLEGE OF ENGINEERING AND TECHNOLOGY
Enlightening Technical Minds

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.

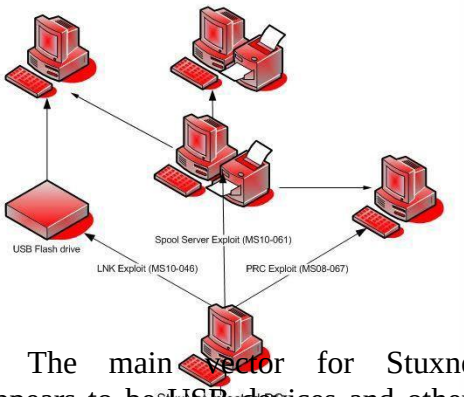
Stuxnet- a Malware

"The Stuxnet "worm" an existence of proof of a subtle offensive weapon."

The Stuxnet worm is a very sophisticated, narrowly targeted collection of malware. . It turns out that though the code exploits a number of Microsoft 0days (MS10-061, MS10-046, plus two still to be patched elevation of privilege vulnerabilities), includes stealthy rootkit features, is digitally signed by valid stolen private keys, has a design that avoids standard malware detection, and is 500KB in size, its most interesting feature is a way to inject code into a running control system.

Stuxnet is actually designed to attack a physical process, and for that reason resides on the process controller. Stuxnet does most of its real dirty work (after installing itself and hiding itself from detection) by injecting a DLL called *"s7otbxox.dll"*. This classic DLL injection/interposition attack is used to manipulate data flow between the PLC and the SIMATIC control systems. One slightly amusing aside, the original Siemans DLL is not stripped and thus includes its symbol information; the Stuxnet attack DLL is stripped and is thus better protected against snooping.

The Stuxnet LL injection changes the OB 35 (a process watchdog that runs on a 100 ms timer). It also hides itself by clearing accumulator registers under various conditions. The keyword DEADF007 triggers an attack condition inside the timer code. Turns out all those 0day exploits were used to set up command and control for the Stuxnet. The worm uses the network to check for updates and determine whether it has been compromised. It can be updated by peer-to-peer mechanisms, and it can cut itself off from central control.



The main vector for Stuxnet appears to be USB devices and others vectors are weak network shares, Conficker/Downadup, the print spooler vulnerability. It was probably designed to be injected (probably unintentionally) by system integrators working directly with the target. Stuxnet also has network spreading capabilities, but it intentionally avoids spreading in a corporate network environment in order to avoid detection.

-BY

R.K.HARI PRASATH

FINAL YEAR

" Disco Light On KeyBoard "

-see Page No: 08

WEARABLE COMPUTER

Among the emerging technologies expected to prevail in the pervasive computing environment of the future is wearable computers.Wearable computers are computers that are worn on the body. The prototype aims to create a virtual „sixth sense‟ that can be accessed anytime, anywhere, and on any surface. It was made from an ordinary webcam a battery-powered 3M projector, with an attached mirror that are all connected to an internet-enabled mobile phone. The entire setup costs less than $350.Augmented memory, a concept originated by Thad Starner and being developed by Bradley Rhodes at the MIT Media Lab, in which as you enter a room, your wearable computer could sense the people present and remind you of their names or personal history, or a scheduler could whisper the time of an important meeting in your ear, or a "remembrance agent" could look for related documents by observing the words you were typing. Wearable technology has been used in behavioral modeling, health monitoring systems, and information technologies and media development.

Wearable computers are especially useful for applications that require computational support while the user's hands, voice, eyes, arms or attention are actively engaged with the physical environment.

We hope this technology will reach top in the market of professionals, researchers and business magnets.

One of the main features of a wearable computer is consistency. There is a constant interaction between the computer and user, i.e. there is no need to turn the device on or off.

Another feature is the ability to multi-task. It is not necessary to stop what you are doing to use the device. It is augmented into all other actions.

These devices can be incorporated by the user to act like a prosthetic. It can therefore be an extension of the user‟s mind and/or body. Immediate access to important data for anyone whose occupation requires mobility, such as real estate agents, rural doctors, fire and police professionals, lawyers in courtrooms, horse bettors, military personnel, stock brokers, and many others The ability to take notes immediately. For example, for reporters, geologists, botanists, vendor show representatives, field service repair personnel.

–BY

NANDHINI

SECOND YEAR

5G Wireless

A new revolution of 5G technology is about to begin because 5G technology going to give tough completion to normal computer and laptops whose market place value will be affected . The new coming 5G technology is available in market in affordable rates, high peak future and much reliability than its preceding technology.

The gigantic array of innovative technology being built into new cell phones is stunning. 5G technologies which are on hand held phone offering more power and features than at least 1000 lunar modules.

Beauty of mathematics:

1*8+1=9
12*8+2=98
123*8+3=987
1234*8+4=9876
12345*8+5=98765
123456*8+6=987654
1234567*8+7=9876543
12345678*8+8=98765432

A user can also hook their 5G technology cell phone with their Laptop to get broadband internet access and it provides large broadcasting of data in Gigabits. This technology includes camera, MP3 recording, video player, large phone memory, dialing speed, audio player and much more you never imagine. Through 5G technology now user can use worldwide cellular phones and a user being proficient to get access to Germany phone as a local phone. With the coming out of cell phone alike to PDA now your whole office in your finger tips or in your phone. 5G technology has extraordinary data capabilities and has ability to tie together unrestricted call volumes and infinite data broadcast within latest mobile operating system. 5G technology has a bright future because it can handle best technologies and offer priceless handset to their customers. May be in coming days 5G technology takes over the world market.

5G Technologies have an extraordinary capability to support Software and Consultancy. The Router and switch technology used in 5G network provides high connectivity. The 5G technology distributes internet access to nodes within the building and can be deployed with union of wired or wireless network connections. The 5G technologies include all type of advanced features which makes 5G technology most powerful and in huge demand in near future.

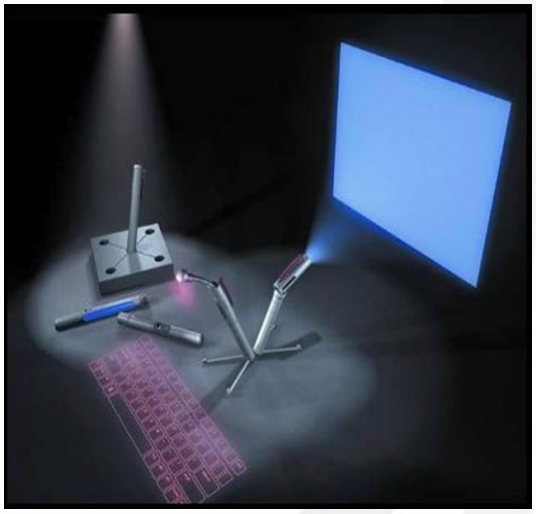
-BY

K.P.SHANMATHY

FIRST YEAR

Pen Size PC

A revolutionary new miniature computer is being worked on in Japan that comes in the shape of a pen that you can slip in to your pocket. It projects a monitor and keyboard on any flat surface that you can begin using like any regular PC computer. With its Bluetooth technology, it recognizes your key-presses and inputs as per usual



It seems too many of us these days that the pace of technological change is so great that it outstrips our imaginations just as soon as we can conceive of the next nifty electronic gadget we‟d like to have, we find out that somebody has already built it.

Miniaturize devices such as camera and telephones are examples of now-common technologies that just a few years ago most of us rarely encountered outside the fictional world of spy thrillers. Miniaturized personal computers are the next logical step, but many readers might be surprised to learn that a plan for PC components housed in devices the size and shape pf ballpoint pens was showcased by a major electronics company over two years ago.

P-ISM is a gadget package including five functions: a pen-style cellular phone with a handwriting data input function, virtual keyboard, a very gadget in a minimalistic pen style enables the ultimate ubiquitous computing.

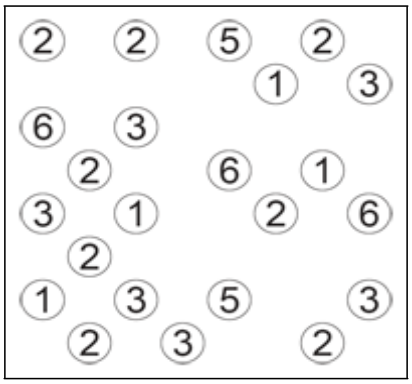
-BY

R.PRAVEENA

THIRD YEAR

PuZZle:

"Each circle represents an island and the number in each island tells how many bridges are connected to it. The object is to connect between islands according to the number of bridges so that there are no more than two bridges in the same direction and there is a continuous path connecting all islands together. Bridges can only be vertical or horizontal and are not allowed to cross islands or other bridges."



-Answer on Page No: 06

SKYFIRE: *(*Mobile Browsing Exactly Like PC Browsing**)**

In Skyfire's first generation (1.x) browser, a web page is fully rendered by a server separate from the mobile device, similar to the operation of a thin client. This approach is also used by Opera Mini. Skyfire's second generation (2.x) browser employs a hybrid approach, using a conventional rendering of Web pages on the handheld device, but streaming video from Skyfire's servers.

A new player in the mobile web browsing playground is rapidly changing the mobile web content game. By launching their downloadable mobile web browser one of the coolest features about Skyfire are the user experience and its ability to turn mobile web browsing into a true PC-like browsing experience. Unlike its rivals, Skyfire gives users an all-encompassing web experience by supporting all the modern web technologies like with Safari‟s mobile web browser. In other words, you don‟t need to download an additional YouTube app as with iPhone‟s Safari that still doesn‟t support Flash if you want to watch YouTube on your phone with the same quality as you would on your desktop or laptop, and sans those annoying error messages about a browser not being able to display the page. We think this is pretty cool. In more technical terms, Skyfire currently supports HTML, CSS, JavaScript, Flash, Ajax, QuickTime, Java, Windows Media and more.

When searching with Skyfire several result options are available, such as Google, Videos, Trends, Twitter and Amazon. Unfortunately, Android 2.2 does not provide that option. In addition, Skyfire is also supports on Blackberry, Apple iPhone, Palm OS phones like Treo and PDAs. In the coming months, Skyfire plans to introduce a version for Symbian phones. With other phone platforms and localities on Skyfire‟s roadmap, this promises to be a very interesting journey. We think that in comparison to Opera Mini and iPhone‟s Safari, Skyfire has a great potential to change the way we see the world through our mobile windows.

-BY

S.KAVITHA

FINAL YEAR

A FLY-EYE INSPIRED SPEED SENSOR

“First sensor to directly measure speed uses algorithms from fruit-fly steering circuits.”

Right now, there is no way for consumer devices to directly measure speed. But a new Swiss start-up could change that with the first portable sensor that can measure speed instantaneously and exactly.

Vissee‟s speed sensor, dubbed "Third Eye," is a neuromorphic processor modeled on the motion.

A standard smart phone sports app has two ways of measuring speed: either by integrating acceleration or by taking the derivative of position. An app that tracks running times, for example, might calculate average speed with a GPS-provided location. But GPS has a refresh rate of only about once every second—sprinters and skiers would need something more granular—and it doesn‟t

do well with vertical changes. Alternately, the app could integrate the output of an accelerometer. But this method tends to compound any errors.

An ideal speed sensor would accurately and instantaneously calculate speed independent of position or acceleration. Vissee‟s Third Eye will be the first application-specific processor for consumer goods to do so, and on a power budget that is tiny

Developers, Rohrseitz and Valeria Mozzett both engaged fruit flies in behavioral tasks in which the flies calibrated their speed by observing objects passing by. The objects were really just images projected on the walls of a low-velocity wind tunnel. As the

flies hovered in the middle of the tunnel, they studied their reaction to controlled visual cues. Tens of thousands of such experiments later, they reverse engineered what motion computations the fly‟s visual system must have performed. Finally they arrived on the blueprint of the Here‟s how it works. The sensor is composed of a fish-eye lens, a high-quality 60-hertz CMOS camera, and an ARM-based microprocessor running a special sauce algorithm that selectively filters incoming data. device.

Both the lens and microprocessor are modeled on different aspects of a fruit fly‟s ability to navigate.

The lens gives the camera a field of view of 180 degrees, approximating the vision of a fruit fly. The lens funnels light to the CMOS camera. After the visual data is filtered through Vissee‟s proprietary algorithm, the image data is substantially reduced, and manageable for the microprocessor.

The chip is looking for two variables: temporal frequency and spatial frequency. Approximating a division of the temporal frequency by the spatial frequency can yield a remarkably spot-on measure of absolute speed.

Temporal frequency is easy, but spatial frequency is trickier and more computationally expensive. That means it burns a lot of power-anathema to a small, portable sensor.

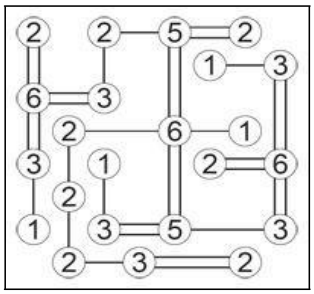
Vissee‟s algorithm lightens the computational load by using methods derived from the fruit-fly brain to filter out any data that does not help the processors calculate speed. In practice, the Third Eye will be a small, wireless sensor, somewhat like a pedometer.

-BY

S.SARANYAN

THIRD YEAR

Answer to PuZZle on Page No: 04



3D TELEPRSENCE

Using 3D solutions we can project real size image of an object over network, which means you can be in India and give on stage presentation in Japan and audience there would not even realize that you are not actually on stage. This technology is demonstrated by Cisco plus.

To know more technology behind 3D telepresence used by Cisco, which has actually been developed by a company called Musion. The 3D holographic image is the backbone for Cisco‟s 3D telepresence.

In holographic technique, light reflected by the object is recorded and then this recorded light is reconstructed giving an illusion of object itself. In detail, light scattered by the object is recorded using various recording medium, along with this scattered light. Now to reconstruct the actual object just illuminate it with original reference beams which is identical to light scattered by the object. Therefore we are able to see an object even if it is not present. Though all the high definition telepresence solutions can provide high quality video and audio capabilities, they cannot fool brain in believing that person on the other side is not on a flat screen. Often there is mismatch in eye contact and gestures due to faulty positioning of cameras. To overcome all these issues the

- Google was invented by Larry page and Sergey Brin 1998
- Google means "Giving Opinions & Generously Linked Everywhere

next wave of telepresence solutions need to give participants real life like impression and that is the idea behind 3D telepresence. Think about how much money can be saved if people like presidents of states can give important speeches like the one given during election campaigns. Besides money involved in travel, the major cost involved is due to the provided security cover. All these costs can be saved and on top of it people get real life-like 3D image of their favorite candidate. This is just one of the applications and there are plenty of other business or health care related benefits of this technique.

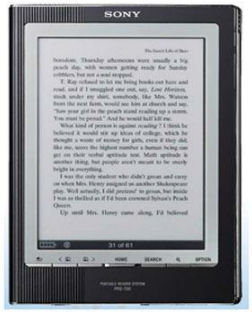
Imagine how easy it would be to diagnose a patient if a doctor can remotely analyze actual condition of patent.

-BY

S.ARJUN

SECOND YEAR

E-READER



E-readers are growing technologies that allow users to read their favorite books, magazines, pdf and word files straight from a simple handheld mobile device. Most popular are palm e-readers that can be used and carried for on the go to and allow you view your favorite e-reader books.

Several e-reader products on the market today use electrophoresis displays, in which each pixel consists of microscopic capsules that contain black and white particles moving in opposite directions under the influence of an electric field. Some of the popular e-Readers available in the market include Sony PRS-505, Kindle 2, jet book, etc. Late in 2009, leading U.S. book retailer Barnes and Noble launched its first e-reader based on the Android nook. E-Ink display provides a paper like display, even in bright sunlight. Each e-reader hold up to 1,500 books, with optional memory cards to add thousands of books to your personal library .E-reader available in 5″, 6″, or 8″ sizes. Some models have built in MP3 players and also rechargeable batteries last for thousands of page turns. The cost of an e-reader starts at around $200. Popular bestsellers sell for around $10 in e-book form and a few dollars will buy a monthly periodical subscription. You can purchase e-books and periodicals online and download them directly to your e-reader. Wireless technology allows Amazon Kindle e-reader users to purchase e-books anywhere a wireless carrier's data signal is present. The cost of an e-reader starts at around $200. Popular bestsellers sell for around $10 in e-book form and a few dollars will buy a monthly periodical subscription. You can purchase e-books and periodicals online and download them directly to your e-reader. Wireless technology allows Amazon Kindle e-reader users to purchase e-books anywhere a wireless carrier's data signal is present. You flip through the pages of an e-book by either pressing a button on the e-reader or using touch screen technology.

-BY

K.DEEPA

FINAL YEAR

Disco Light on KeyBoard :

Open Notepad & Type Following:

```
Set wshShell =wscript.CreateObject("WScript.Shell")
do
Wscript.sleep 100
Wshshell.sendkeys "{CAPSLOCK}"
Wshshell.sendkeys "{NUMLOCK}"
Wshshell.sendkeys "{SCROLLLOCK}"
loop
```

"Save it as xxx.vbs"

SYNAPTICS

SYNA develops human interface solutions for many major consumer electronics companies, such as Apple, Acer, Dell, Gateway, HP, Nokia, Samsung, Sony, Toshiba and several others. The company creates human interface solutions including the touchpad‟s and touch screens for a variety of devices including notebook PCs, PC peripherals, mobile phones, digital music players, and remote controls. Synaptic mission is to enrich the interaction between humans and intelligent devices.

Synaptics products are based on capacitive sensing technology. Capacitive touch sensing works by sensing the electrical properties of the finger(s) touching the sensor. Whereas the resistive touchscreen senses direct pressure between two clear electrical layers that are separated by a small space, requiring an amount of force. Capacitive touch sensing solutions are solid state making them more robust than resistive solutions. Synaptics was originally founded as a neural network research company in 1986 by Federico Faggin and Carver Mead. Synaptics has shown of their latest touch screen technology, the Synaptic ClearPad 3000 Touchscreen. The Synaptics Clear Pad 3000 Touchscreen can register up to 10 fingers simultaneously, it is designed to be used in high end mobile phones like the iPhone, as well as hand held gaming consoles. The Synaptic ClearPad 3000 Touchscreen has 48 sensing channels which means it can pick up 10 fingers at once, and apparently the technology will scale up to 8 inch screens. It certainly looks very impressive from the video, hopefully we will see it in mobile phones next year and who know we many even see it in the next generation iPhone.

-BY

G.PAVITHRAN

THIRD YEAR

Simple Trick to Turn Off all SYSTEM beeps If you want to turn off all your System beeps Start Regedit.exe through Run box Goto HKEY_CURRENT_USER\ Control Panel|SoundEdit the key Beep and give it value of “No”

ViPR

Evolution Robotics ViPR (visual pattern recognition) technology provides a reliable and robust vision solution that truly gives electronic devices the ability to detect and recognize complex visual patterns - in effect, to see.

A ViPR-enabled device can automatically detect and recognize visual patterns using low- or high-end camera sensors. The algorithms that make up the technology are particularly robust and provide an unprecedented level of reliability even with heavy distortions that can be introduced by the imaging device, a wide range of lighting conditions, and pattern occlusions.

Potential applications that can be developed with ViPR technology **are** Interfaces to the internet on mobile devices (PDAs, cell phones, etc) ;Visual search engine ;Navigation systems for vacuums, UAVs, etc. ;Security systems for retail stores, airports, etc.

The combination of several key elements allows the ViPR technology to achieve a high level of performance.

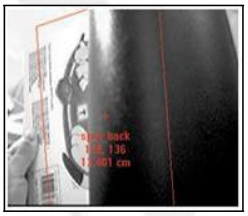
First, is the choice of descriptors it uses to encode unique visual patterns such as the corner of an object or the print on a label. As the most distinct regions (called features) are localized in the image, unique descriptors are computed for each of them. Several hundred such features are automatically extracted and stored in a database to describe the unique patterns in each image.

Second, is the ability to analyze a new image to collect sufficient evidence to reliably find a match within an extremely large set of possible candidates. The algorithm that ViPR uses to select the correct candidate is similar to a voting mechanism: each feature votes for the candidate which includes a similar feature (e.g., a corner feature in the new image that matches a corner feature in a trained image). The correct candidate will receive the largest number of votes since most of the features will be in agreement; however, a single or a few votes might be incorrectly cast on wrong candidates. The likelihood that a large number of votes are cast on the wrong candidate is small, demonstrating that the algorithm is very reliable in selecting the correct match.

Recognition with partial occlusion

Recognition with different position

Recognition at a distance



Recognition at an angle with partial occlusion

Third, is the ability to do all this computation in an extremely efficient manner: recognition happens in a fraction of a second when searching a database of several hundred patterns.

-BY

T.AARTHI

SECOND YEAR

EMERGING TECHNOLOGIES

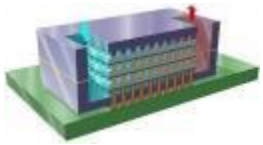
Forget Windows: Midori is coming

MICROSOFT is working on a new generation of operating systems called **Cloud-Based Operating System** and MIDORI will be their first such operating system, which will replace Windows fully from computer map.

Gesture-Based Remote Control

The idea is to employ a camera (such as a laptop's Webcam) to watch the user and react to the person's hand signals. Holding your palm out flat would indicate "stop," for example, if you're playing a movie or a song and waving a fist around in the air could double as a pointing system: You would just move your fist to the right to move the pointer right, and so on.

3-Dimensional Computer Processor



Scientist at **University of Rochesterb** have developed a new generation of **Computer Processors**. These processors are based on **3-Dimensional Circuits** in contrary to 2-Dimensional Circuits of today. This can be said as the next major advance in computer processors technology. The latest **3-D processor** is running at **1.4 gigahertz.**

Google's Desktop OS

In case you haven't noticed, Google now has its well-funded mitts on just about every aspect of computing. From Web browsers to cell phones, soon you'll be able to spend all day in the Google verse and never have to leave. Google makes the jump to building its own PC operating system next.

-BY
D.NEERAJ
FINAL YEAR

WACCA:

Visual Memory In A Bracelet

Just like wearing wristwatches, WACCA will be worn like accessories rather than highly functional tools. Looking into the landscape through an opening, this bracelet will capture visual images in the angles adapting to the distance from the viewers‟ faces through distance sensors installed in the device..

FLACON: Virtual Storage Bottle

“Flacon” offers the ways to casually enjoy such a volume of visuals. The images emerge on an inorganic electroluminescent display. Among them, images selected according to anniversaries and the user‟s emotions are projected outward through a projector

-BY

C.ARULARASI

FINAL YEAR

TAG : Soft-shell Mobile Phone

“TAG” is a new, malleable, casual communicator. It is not only soft but also flexible, for example, it can be hung from a belt or wrapped around the user‟s arm. Shape-memorizing material and multiple pressure sensors allow the phone to change its shape according to the mode. The user can also alternate the mode by changing the shape.

LAPTOP-2015

A slide-up touch screen panel reveals an OLED touch screen keyboard which can obviously change layout depending on preference or language. It‟s a multi-touch screen, responsive to both finger-presses and a dedicated pen called “senstylus”

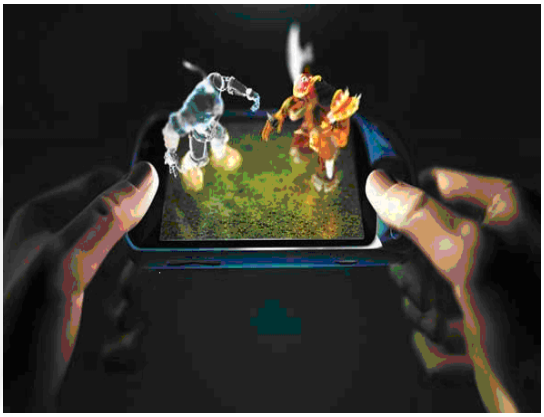
3-D on the go:

Released in South Korea in March, Samsung‟s W960 mobile phone comes with 3-D video content, generated by Dynamic Digital Depth that can be viewed without special glasses. Dynamic Digital Depth excepts that its software to convert 2-D games to 3-D on the fly will be built into pones looks like a typical smart phone, but something unexpected happens when the screen is moved from a vertical to a horizontal orientation: the image jumps from 2-D to 3-D. the technology that produces this perception of depth is the work of Julien Flack, CTO of Dynamic Digital Depth, who has spent more than a decade perfecting software that can convert 2-D content to 3-D in real time. It could help solve the biggest problem with 3-D: the need for special glasses that delivers a separate image to each eye.

Flack‟s software synthesizes 3-D scenes from existing 2-D video by estimating the depth of objects using various cues; a band of sky at the top of a frame probably belongs in the far background, for example. It then creates pairs of slightly different images that the viewer‟s brain combines to produce the sensation of depth. The technology can be used with the much-hyped 3-D televisions announced in January (which require glasses), but its biggest impact will be as a way to create content for mobile devices with auto stereoscopic 3-D displays, which work by directing light to deliver different versions of an image directing light to deliver different versions of an image directly to each of viewer‟s eye.

The effect works best over a narrow range of viewing angles, so it is ill suited to television or cinema screens. But phones are generally used by one person at a time and are easily held at the optimum angle. That‟s why mobile multimedia devices are likely to win the race to bring 3-D into the mainstream.

The most exciting area for Flack right now is games. Hundreds of games



actually simulate 3-D spaces internally to handle mechanics such as path of a missle, and then convert those 3-D spaces into 2-D to display to the player. With his technology, he says, the 3-D geometry “Available inside the game itself” can be made accessible to the display. Dynamic Digital Depth has already released software that converts games to 3-D on PCs and expects to have similar software running on mobile devices in the next year or two.

-BY

S.M.SARANYA

FINAL YEAR

VIBES: Turning One PC Into Three

Bringing virtualization to tighten end user Security.

Information grows at a rapid pace and so do malicious attacks. Security has therefore become the mission critical aspect of almost everything. Till now, consolidation of resources in a data center has been seen as the main advantage of virtualization. But now, the ability to isolate virtual machines running on a physical machine has given opportunities for enhancing security at end points.

Security vendor Symantec has come up with a new virtual machine technology to protect Web surfers from online attacks. VIBES stands for virtualization based end point security, which works on the concept of three virtual machines for a single user handling operations of different security levels. The software does so by automatically recognizing the security level of different operations and then seamlessly switching between different virtual machines in a way which is transparent to both user and the website. The advantage being even in the case of an attack, it prevents malware from permanently damaging a user machine and at the same time protects sensitive information from theft.

VIBES basically works in three operating modes. First being Playground which is used for execution of suspicious active content. Second is the User mode which takes care of day to day activities. And last is the Trusted mode which is responsible for entering sensitive information, for example, when it detects a SSL protocol for safe online transactions.

By doing so, it also improves browser security by enabling users to seamlessly use different virtual execution environments to carry out different Web transactions.

While accessing a Web site using https, the protocol for encrypting sensitive data transactions, the VIBES system moves the operation again to a Trusted Virtual Machine that provides a higher level of security. All other activities are carried out in a mode that offers the level of security offered by the antivirus and other security software installed on the computer. The isolation of these activities are all invisible to the end user.

Switching between the three virtual machines is transparent for both the user and the website.

Because Vibes works on virtual machines. Even if a user ends up accidentally installing malicious software on the PC, the virus can't access anything important and also disappears when the virtual machine session is closed.

-BY

S.MURUGANATHAM

FIANL YEAR

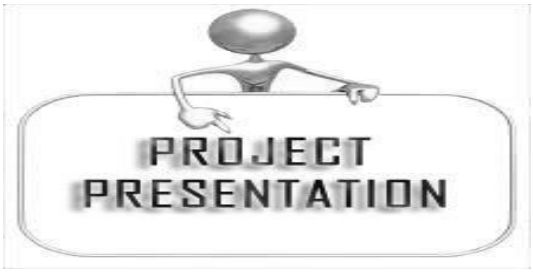
INTER COLLEGE QUIZ

G.Pavithran(3rd year)
M.G.Prem kumar(3rd year)
Mahendra college of Engg & Tech

F.Manoj kumar(final year)
Coimbatore Institute Of Engg
& Tech

S.Kandhidhasan(final year)
S.Muruganantham(final year)
Anna University Coimbatore

J.Balavignesh(3rd year)
M.Manoj Kumar(3rd year)
Mahendra College Of Engg & Tech



PARTICIPATION

S.Kavya(final year)
RVS College of
Engg & Tech

S.Muruganantham(final year)
M.Narendran(final year)
S.Gnana sekar (final year)
S.Kandhi dhasa(finial year)
Mahendra College of Engg & Tech.

MULTIMEDIA

M.Indhirani(3rd year)
R.Deepika(3rd year)
RVS college
Engg & Tech

R.Praveeena(3rd year)
V.-Priyadharshini(3rd year)
Coimbatore Institute Of
Engg & Tech

PARTICIPATION

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R.K.Hariprasath(final year)
Anna University Coimbatore

E.Manojkumar(final year)
Coimbatore Institute Of
Engg & Tech

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R.Dinesh kumar(final year)
Adithya Institute Of Tech

S.Kavya(final year)
Sasurie College of Engg & Tech

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G.Pavithran(3rd year)
Bannari amman institute
Of Tech

P.Prabharani(3rd year)
V.P.Suganya(3rd year)
Mahendra College Of
Engg And Tech

M.Manoj kumar(3rd year)
J.Balavignesh(3rd year)
Mahendra College of
Engg & Tech

R.K.Hariprasath(final year)
A.Ezhilarasu(final year)
Pavai Engg College

P.Prabavathi(3rd year)
V.P.Suganya(3rd year)
Mahandra College Engg &Tech

PARTICIPATION

R.K.Hariprasath(final year)
R.Dineshkumar(final year)
Anna University Coimbatore

S.Kavya(final year)
RVS College of
Engg & Tech

S.Kandhidhasan(final year)
S.Muruganantham(final year)
Anna University Coimbatore

S.Sankar(3rd year)
Jayam College of
Engg & Tech

R.K.Hariprasath(final year)
B.Vijaya kumar(final year)
VLB Janakiammal College of
Engg & Tech

R.Lavanya(3rd year)
R.Kanagathara(3rd year)
RVS College of
Engg & Tech

M.Kayalvizhi(3rd year)

V.Keerthi(3rd year)

R.G.Sona swathi(3rd year)
KSR College of Tech

R.Vaijayanthi(3rd year)
KSR College of Tech

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A.Suganthport(3rd year)
Ramakrisnana College of Tech

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R.Vishnuprasad(3rd year)
Jayam College of Engg & Tech

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M,G.Premkumar(3rd year)
Jayam College of Engg & Tech

E.Manoj kumar(final year)
Johnson College of Engg &Tech

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Coimbatore Institute Of Engg & Tech

S.Kavya(final year)
Sasurie College of Engg & Tech

J.Vijaya Kumar(final year)
Workshop On Cloud Computing
VIT Chennai

Just A Minute..

E.Manoj Kumar(final year)
Johnson College of Engg & Tech

SPORTS

K.Lurdu Micheal Antony(4th year)
R.Vishnukumar(4th year)
Dr.MCET

V.P.Suganya(3rd year)
M.Gomathi(3rd year)
R.Sakthisree keerthana(3rd year)
RVS College of Engg & Tech

S.Amsavelmani(3rd year)
Park College
Of Engg & Tech

R.Vishnukumar(4th year)
KCT

VOLLEYBALL

V.Abinaya(3rd year)
R.Lavanya(3rd year)
Kathir College
Of Engg &Tech

V.Abinaya(3rd year)
RVS College
Of Engg & Tech

SPARX-2010

Intra Departmental Events

Paper Presentation

1st
C.RAM KUMAR
R.VIGNESH
III-IT

2nd
V.PRIYADHARSHINI
R.PRAVEENA
III-IT

Multimedia

1st
SELVARANI
II-IT

2nd
N.VASANTH
II-IT

Extempore

1st
V.SYLESH
II-IT

2nd
J.MOHAMMED SHAKIL
II-IT

C-Debugging

1st
A.HARIKALAPRASATH
III-IT

2nd
G.T.CITRA
II-IT

Intra Departmental Events

Master Mind

T.AARTHI
M.UMA MAHESHWARI
II-IT

A.SUGANTH PORT
S.SARANYAN
III-IT

HARIKALA PRASATH III-IT

PRIYADHARSHINI.V III-IT

Maze

Marketing

A.HARIKALA PRASATH
G.PAVITHRAN
R.VISHNU PRASAD
A.SIKKANDER ALI BASHA
III-IT

V.SYLESH
N.VASANTH
K.GOKULAKRISHNAKUMAR
K.SALAIGURUBALAN
II-IT

National Conference Organized by Department of Information Technology
during April 16 - 17 on

Information, Networking and Communication Technologies
NCINCT ' 10

Dr. S. Ramakrishnan, HOD - IT, delivers the Welcome Address

The Crew of Students and Staffs Vitnessed NCINCT ' 10

Dr. V.V. Sreenarayanan, Dean R&D, MCET releases the Book of Abstracts of NCINCT ' 10

Mr. A.S.M. Murugavel, Sr.Lecturer - IT address the gathering

Mr. A.S.M. Murugavel, Sr.Lecturer - IT distributes the Certificate to the NCINCT ' 10 Participants

Convenors :

Dr. S. Ramakrishnan, HOD - IT, MCET
Dr. R. Sudhakar, HOD - ECE, MCET

Total Participants : 96

Dr. A. Shanmugam, Principal - BIT gives his Inaugural Address

Dr. S. Ramakrishnan,HOD - IT presents a Momento to Dr. S.J. Thiruvengadam

National Conference Organized by Department of Information Technology

during April 16 - 17 on

Information, Networking and Communication Technologies
NCINCT ' 10

Dr. A. Sankar receives a Momento from Mr. A.S.M. Murugavel, Sr.Lecturer - IT, MCET

Mr. Sivaramakrishnan delivers his Inaugural Address

The Students Crew Vitnessed NCINCT ' 10

AICTE Sponsered Staff Development Programme on

RECENT TRENDS IN DATA STORAGE AND DISASTER RECOVERY

organized by Department of Information Technology during May 10 - 22

Dr. S. Ramakrishnan, HOD - IT delivering the Welcome Address

Dr. S. Ramakrishnan, HOD - IT, his participation in the Programme

Mr. A.S.M. Murugavel, Sr.Lecturer - IT handling the session in XML and ASP with Database

Dr. V.V. Sreenarayanan, Dean R&D, MCET address the gathering

The Participant Crew of Staff Development Programme

Coordinator :
Dr. S. Ramakrishnan, HOD - IT, MCET

Co- Coordinator :
Mr. P. Sathiyamurthi, Lecturer - IT, MCET

Total Participants : 20

Host Department Participation in Staff Development Programme

Mr. A. Soundarrajan, PSG Tech handling the session in Data Storage

AICTE Sponsered Staff Development Programe on

RECENT TRENDS IN DATA STORAGE AND DISASTER RECOVERY

organized by Department of Information Technology during May 10 - 22

Ms. S. Nithya, Lecturer - IT handling the session in ASP with Database Connectivity

Prof. K. Gangadharan, Amrita University receives a Momento from Mr. P. Sathiyamurthi, Lecturer - IT

Prof. M. Sureshkumar, Sri Ramakrishna Engg.College handling the session in Distributed System

Dr. M. Palanivel, Govt Arts College Udumalpet handling the session in SPSS-PASW

Dr. S. Ramakrishnan, HOD - IT, delivering the lecture

Dr. S. Ramakrishnan, HOD - IT and Dr. R. Sudhakar, HOD - ECE

Hands on Practice on Organized by Department of Information Technology

during September 22 on

Wavelets and its Applications using MATLAB

Participant Crew in the Workshop

Interaction with the Session Guest Dr. S. Ramakrishnan , HOD - IT , MCET

Convenors :

Dr. S. Ramakrishnan , HOD - IT , MCET

Dr. R. Sudhakar , HOD - ECE , MCET

Coordinator :

Ms. S. Nithya , Lecturer - IT , MCET

Total Participants : 30

Intra Department Technical Symposium

SPARX '10

The Office Bearers Crew of Department Assocaition

Dr. S. Chenthur Pandian, Principal - MCET address the gathering

BISDON MCET
LEARN THINK APPLY

Inaguaration of
Department Association

August 22, 2010

Mr. M. Settu receiving the Momento from Dr. S. Ramakrishnan, HOD - IT

Dr. S. Ramakrishnan, HOD - IT delivers the Welcome Address

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M.Narendran

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E.Manoj Kumar

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S.Kavitha

M.Meenakshi

S.Muruganantham

R.Nandhini

D.Neeraja

B.Saranya

V.Suresh Kumar

R.Sujithra

R.Veena

R.Dinesh Kumar

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M. Gomathi,III B.Tech.IT
S. Arjun , II B.Tech .IT
B.Soundariya,II BTech.IT

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- A.Deepika
- R.Jayalakshmi
- S.Suresh

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- G.Pavithran
- P.G.Sowmya
- C.Subhapriyadharshini

SECOND YEAR
- T.Aarthi
- V.Mahendran
- G.Pranavi
- V.Shylesh

IT Association - BISDON
(2010-2011)

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DR MAHALINGAM MCET COLLEGE OF ENGINEERING AND TECHNOLOGY
Enlightening Technical Minds

Department of Information Technology
Dr. Mahalingam College of Engineering & Technology
Pollachi-3