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- INSPIRE
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Ylectraze spectrum

DEPARTMENT OF ECE

Helping you achieve your future goals

ECE Spectrum continuously strives to nurture the intellect in one-self by providing an environment which stimulates the technical and general mind of students. It acts as efficacious platform to exhibit ones technical ideas and organizing abilities.

DR MAHALINGAM MCET COLLEGE OF ENGINEERING AND TECHNOLOGY

Enlightening Technical Minds

Dr.Mahalingam College of Engineering and Technology

Pollachi — 642 003

DR.MAHALINGAM COLLEGE OF ENGINEERING & TECHNOLOGY

(AUTONOMOUS)

NPTC –MCET Campus, Udumalai Road,Pollachi-642 003.
Ph:04259-236030/40/50;Fax:04259-236070.

VISION OF THE INSTITUTE:

We develop a globally competitive workforce and entrepreneurs.

MISSION OF THE INSTITUTE:

Dr.Mahalingam College of Engineering and Technology, Pollachi endeavors to impart high quality, competency based technical education in Engineering and Technology to the younger generation with the required skills and abilities to face the challenging needs of the industry around the globe. This institution is also striving hard to attain a unique status in the international level by means of infrastructure, start-of-the-art computer facilities and techniques.

VISION OF THE DEPARTMENT:

To strive for excellence in Electronics and Communication Engineering education, research and technological services imparting quality training to students, to make them competent and motivated Engineers.

MISSION OF THE DEPARTMENT:

Department is committed to

- Impart quality engineering education in the areas of Electronics , Signal Processing, Embedded Systems and Communication Networks.
- Equip the students with professionalism and technical expertise to provide appropriate solutions to societal and industrial needs.
- Provide stimulating environment for continuously updated facilities to pursue research through creative thinking and team work.

MESSAGE FROM THE SECRETARY

Prof. C. Ramasamy., M.E., F.I.V.,

It gives me great happiness to note that the students of Electronics and Communication Engineering, MCET are bringing out the Version-2 of the department newsletter ”Ylectraze v2.0”. From the first edition I understand that this magazine is intended to bring out the hidden literary talents in the students and also to inculcate leadership skills among them. The newsletter has served as a platform for the students to share their knowledge and ideas. I expect the contributions to this magazine to be of high standard and quality.

I wish all the success for this venture.

Sd/- Prof C .Ramasamy

MESSAGE FROM THE DIRECTOR (ACADEMIC)

Dr. S. Vijayarangan., M.E., Ph.D., FIE.

I feel extremely delighted to observe that the department of ECE is coming out with a magazine this year also with the dedicated and committed efforts of the faculty and the students of The Editorial Board. The activity depicts the commitment and involvement of students and their thirst for knowledge.

I congratulate the efforts of the members of The Editorial Board in bringing out the second issue of the magazine. It is because of their selfless and untiring efforts that we see the magazine enriched with variety of articles.

Sd/- Dr S. Vijayarangan

MESSAGE FROM THE PRINCIPAL

Dr. M. Ramakrishnan, B.E., M.E, Ph.D

The magazine of the department is the reflection of the creativity of the students, involved in multifarious activities. It speaks about their imaginative creativity through the medium of a language given in literary and artistic shape.

I feel gratified to see that the department is doing its best in carrying out the mission of grooming the students as such professionals who are not only competent enough to combat the challenges in their life but also become good human beings with moral excellence and social sensitivity

Sd/- Dr. M. Ramakrishnan

MESSAGE FROM HOD

Dr.R.Sudhakar B.E., M.E., Ph.D

I feel privileged in presenting the second issue of our department association magazine. I would like to place my sincere and heartfelt thanks to all those who have contributed to make this effort a success. My special thanks to the Management, for their guidance which enabled us to bring out this edition.

The magazine has a variety of articles endowed with different subjects contributed by the students of our department and their participation in various activities round the year.

I extend my gratitude to the entire team of the Editorial Board for their constant exertion, revision and support in bringing out the magazine in the present form.

Sd/- Dr. R.Sudhakar

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Student's articles

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...and many more

Kirobo

Kirobo is Japan's —FIRST ROBOT ASTRONAUT‖ , developed by tomotaka takahashi . Kirobo was developed to accompany an astronaut in space.

Kirobo, affectionately as Kibo, flew into outer space on August 4 aboard the H-IIB Launch Vehicle No. 4. The spacecraft was launched from the Tanegashima Space Center in Japan, and Kibo arrived at the International Space Station (ISS) on August 10.

A twin to Kirobo, named Mirata, was created with the same characteristics. Mirata will stay on Earth as a backup crew member.

Principle dimensions:

Height approx.: 34 cm
Full width approx.: 18cm
Depth approx.: 15cm
Weight Approx.: 1000 g
Spoken language: Japanese.

Primary equipment:

- Voice recognication
- Natural language processing
- Voice (speaking) composite
- Information & communication functions
- Communication operations
- Facial recognication camera
- Camera for recording

Kirobo is specially designed to navigate zero-gravity in which he floats through the air. Its main goal is to see how well robots and humans can interact, hopefully leading the way to robots taking more active roles in assisting astronauts on missions.

Astronauts will no longer have to risk their lives in space travel.

"A robot took one small step toward a brighter future for all"

– Kirobo the Robot

K.Meenachi, II BE ECE

Farming With Robots

Agricultural robots are the fastest growing technology developed to perform various complex tasks that are difficult for humans to achieve. Recent news claims that the Japanese government has taken an initiative to use robotic operators in lands swamped by March 2011 tsunami. This —Dream projectll was planned to involve unmanned tractors working in the farm on

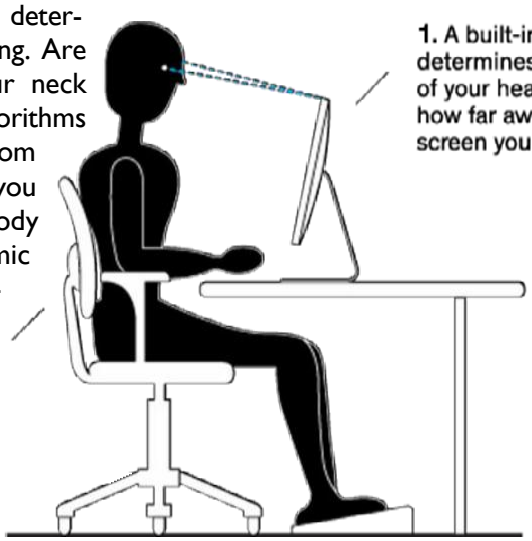
the disaster site. The robotic farmers are capable of cultivating vegetables, fruits, soybeans, wheat and rice,

which are then packed in boxes and shipped across the country by this robotic technology. This process is accompanied by recycling of carbon dioxide using machinery in an attempt to reduce the use of fertilizers.

U.Kandhar Vishnu, II BE ECE

Anti-Slouch Screen

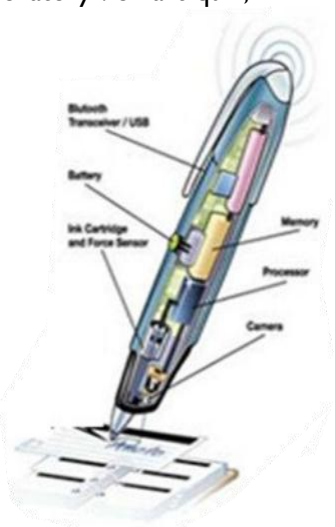
If you slump down when you're typing on an ErgoSensor monitor by Philips, it'll suggest that you sit up straighter. To help office workers avoid achy backs and tired eyes, the device's built-in camera follows the position of your pupils to determine how you are sitting. Are you too close? Is your neck tilted too much? Algorithms crunch the raw data from the sensor and tell you how to adjust your body to achieve ergonomic correctness. The monitor can also inform you that it's time to stand up and take a break, and it will automatically power down when it senses that you've left.



S.Aravind, IV BE ECE

Smart Quill

Smart Quill is a new kind of pen of the electronic era. Invented by Lyndsay Williams of the Microsoft Research Cambridge UK Laboratory . Smart quill, a pen that can remember th it is used to write, and transform them into com text.



This classy pen is p ered by AAA battery .It write on any surface wheth is one paper, tablet, and type of screen or even on ai It contains an ink cartridge so that users can see what they write down on paper. Smart Quill has 4MB EEPROM memory. Up to 10 pages of notes can be stored locally on the pen.

A tiny light at the tip allows writing in the dark. When the pen is kept idle for some time, power gets automatically off dark.

The principle behind the efficient functioning of the smart pen is it makes use of sensors that trace the movements it is being exposed to using the earth's gravity. The pen records the information inserted by the user. Your words of wisdom can also be uploaded to your PC through the —digital inkwellll , while the files that you might want to view on the pen are downloaded to Smart Quill as well. The pen accepts only the owner's handwriting and rejects intruder's handwriting. It enables signature verification.

G.Aravinth, IV BE ECE

Playing Computer Games Together Makes Brains Feel and Think Alike

Scientists have discovered that playing computer games can bring players' emotional responses and brain activity into unison. By measuring the activity of facial muscles and imaging the brain while gaming, the group found out that people go through similar emotions and display matching brainwaves.

A striking discovery indicates further that the more competitive the gaming gets, the more in sync are the emotional responses of the players. The test subjects were to report emotions themselves, and negative emotions were associated with the linkage effect.

"It's well known that people who communicate face-to-face will start to imitate each other. People adopt each other's poses and gestures, much like infectious yawning. What is less known is that the very physiology of interacting people shows a type of mimicry -- which we call synchrony or linkage," explains Michiel Sovijärvi-Spapé.

R.Maheshwari, IV BE ECE

Virtual Reality

Virtual reality can be defined as an upcoming technology that makes users feel in a Virtual Environment (VE) by using computer hardware and software.

A simulated, three-dimensional world is created around the user in which he/she could interact with objects, people, and environments. Typically three-dimensional life-sized images with support of audio devices are presented around the user and the perspective is modified in accordance with the user input (generally head or eye movements).

real world envi with the digital o the human sense immersed in the A Virtual Env ment can be created on different extents depending on the computer based platform ranging from a cell phone screen to a desktop monitor or a fully Immersive Virtual Environment (IVE).

HOW VR WORKS

To enter in a VE, a user dons special gloves, earphones, and goggles, all of which send their output to the computer systems. The virtual environments are intended to replace the

M.K.Sethupathy, III BE ECE

Snapdragon 805

Agricultural robots are the fastest growing technology developed to perform various complex tasks that are difficult for humans to achieve. Recent news claims that the Japanese government has taken an initiative to use robotic operators in lands swamped by March 2011 tsunami. This —Dream project‖ was planned to involve unmanned tractors working in the farm on the disaster site.

The robotic farmers are capable of cultivating vegetables, fruits, soybeans, wheat and rice, which are then packed in boxes and shipped across the country by this robotic technology. This process is accompanied by recycling of carbon dioxide using machinery in an attempt to reduce the use of fertilizers.

M.Geerthana, II BE ECE

Cell Phone Operated Land Rover

In this project, robot is controlled by cell-phone that makes a call to the cell-phone attached to the robot. In the course of a call if any button is pressed a tone corresponding to the button pressed is heard at the other end of the call the tone is called dual-tone multiple/ frequency (DTMF TONE) the robot perceives this DTMF tone with the help of the phone stacked in the robot.

The received tone is processed by the ATmega16 microcontroller with the help of DTMF decoder MT8870.The decoder decodes the DTMF tone into its equivalent binary digit and this binary number is send to the microcontroller. The microcontroller is preprogrammed to take a decision for any given input and out-puts its decision to motor drives in order to drive the motor for forward or backward motion or a turn.

The mobile that makes a call to the mobile phone stacked in the robot acts as a remote. So the simple robotic project does not require the construction of receiver and transmitter unit.

V.K.Akshai Gracea, II BE ECE

Did you know that...

Every day is a holiday somewhere in the world.

Apples are more effective at waking you up in the morning than coffee.

The average human brain contains around 78% water.

Tennis was originally played with bare hands.

Brain implants

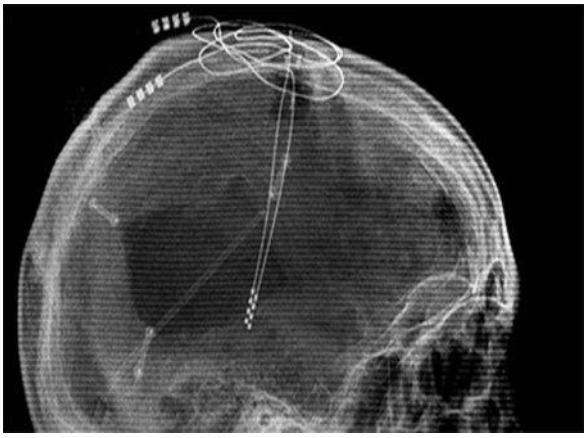
Our world is determined by the limits of our five senses. We can't hear pitches that are too high or low, nor can we see ultraviolet or infrared light—even though these phenomena are not fundamentally different from the sounds and sights that our ears and eyes can detect. But what if it were possible to widen our sensory boundaries beyond the physical limitations of our anatomy? In a study published recently in Nature Communications, scientists used brain implants to teach rats to —see‖ infrared light, which they usually find invisible. The implications are tremendous: if the brain is so flexible it can learn to process novel sensory signals, people could one day feel touch through prosthetic limbs, see heat via infrared light or even develop a sixth sense for magnetic north.

"When you think about something and don't really know much about it, you will automatically get information."

And some very prominent Internet firms simply take it for granted that most of us will eventually have brain implants that connect us directly to the Internet.Google has a plan. Eventually it wants to get into your brain. —When you think about something and don't really know much about it, you will automatically get information.‖

Neural implants, also called brain implants, are medical devices designed to be placed under the skull, on the surface of the brain. Often as small as an aspirin, implants use thin metal electrodes to —listen‖ to brain activity and in some cases to stimulate activity in the brain. Attuned to the activity between neurons, a neural implant can essentially —listen‖ to your brain activity and then —talk‖ directly to your brain.

If that prospect makes you queasy, you may be surprised to learn that the installation of a neural implant is relatively simple and fast. Under anesthesia, an incision is made in the scalp, a hole is drilled in the



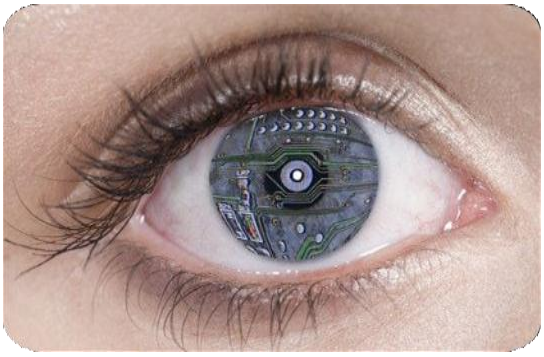
skull, and the device is placed on the surface of the brain. Diagnostic communication with the device can take place wirelessly. When it is not an outpatient procedure, patients typically require only an overnight stay at the hospital.

In the future, the minds of most people could potentially be connected to the Internet 24 hours a day. Imagine sending an email or answering your phone by just thinking about it. According to the New York Times, this is where we are eventually heading.

Soon, we might interact with our smart phones and computers simply by using our minds. In a couple of years, we could be turning on the lights at home just by thinking about it, or sending an e-mail from our smart phone without even pulling the device from our pocket. Farther into the future, your robot assistant will appear by your side with a glass of lemonade simply because it knows you are thirsty.

M.Anbarasan, IV BE ECE

Electronic EYE– A Non Invasive Aid



ELECTRONIC EYE is used for the visually impaired people to provide the informations for them. The ultimate position is reached only when it reaches the physically challenged people who are in ultimate need of it. During the last decades, several research efforts have been directed toward providing better accessibility and navigation to blind individuals in their living environment by developing new devices and scientific methodologies.

ELECTRONIC EYE – a NON INVASIVE AID for the visually impaired is designed. This system would give the visually impaired an opportunity to integrate with society more easily providing a greater sense of independence.

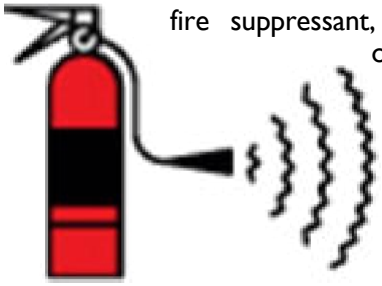
They are treated by the use of cameras, 2D localizations, RFID technologies. But these technologies have many drawbacks. Inorder to overcome these drawbacks the ELECTRONIC EYE technology is used. A real time implementation using cost effective technique is used to achieve the aim.

Commercially this proposal has been implemented as a prototype and successfully tested. The walking stick is available made of the metal. The RFID reader is placed on it along with sensors are attached. This is not a perfect cure for the people just to help them with a chip which gives voice.

T.Kavitha, II BE ECE

A New Firefighter

You need a lot of water to put out a sizable blaze, and the chemicals used in fire extinguishers can be toxic (halons, the most effective chemical fire suppressant, create holes in the ozone layer). So the Defense Advanced Research Projects Agency at the Pentagon has developed a hand-held wand that snuffs out fires, without chemicals. An electric field destabilizes the flame's underlying structure rather than blanketing the fire to smother it. Eventually, the technology could be used to create escape routes or extinguish fires without damaging sensitive equipment nearby.



S.Sangeetha, IV BE ECE

Engineers Make World's Fastest Organic Transistor

Two university research teams have worked together to produce the world's fastest thin-film organic transistors, proving that this experimental technology has the potential to achieve the performance needed for high-resolution television screens and similar electronic devices.

For years engineers the world over have been trying to use inexpensive, carbon-rich molecules and plastics to create organic semiconductors capable of performing electronic operations at something approaching the speed of costlier technologies based on silicon.

Engineers from created thin-film organic transistors that could operate more than five times faster than previous examples of this experimental technology.

They achieved their speed boost by altering the basic process for making thin-film organic transistors. First they spun the platter faster. Second they only coated a tiny portion of the spinning surface, equivalent to the size of a postage stamp.

These innovations had the effect of depositing a denser concentration of the organic molecules into a more regular alignment. The result was a great improvement in carrier mobility, which measures how quickly electrical charges travel through the transistor.

The researchers called this improved method "off-center spin coating." Further improvements to this experimental process could lead to the development of inexpensive, high-performance electronics built on transparent substrates such as glass and, eventually, clear and flexible plastics.

R.Pavithra, IV BE ECE

Puzzle It!

5 pirates of different ages have a treasure of 100 gold coins. On their ship, they decide to split the coins using this scheme: The oldest pirate proposes how to share the coins, and ALL pirates (including the oldest) vote for or against it. If 50% or more of the pirates vote for it, then the coins will be shared that way. Otherwise, the pirate proposing the scheme will be thrown overboard, and the process is repeated with the pirates that remain.

As pirates tend to be a bloodthirsty bunch, if a pirate would get the same number of coins if he voted for or against a proposal, he will vote against so that the pirate who proposed the plan will be thrown overboard.

Assuming that all 5 pirates are intelligent, rational, greedy, and do not wish to die, (and are rather good at math for pirates) what will happen?

Morpho Wings

The surface of *Morpho* wings are essentially covered in nanoscale solar cells, honeycomb-like structures that trap light, much like a fibre-optic cable, and convert it to heat to keep the insect warm in co environments. Miyako deposited carbon nanotubes onto the butterfly wings, where they se assembled into nanostructures mimic the *Morpho*'s multilayere agonal microstructures.

The resulting hybrid gives the term "bio-tech" new meaning: the natural pattern provided by the wings creates a large light-receiving surface area, and the physical properties of nanocarbons produce heat through vibrational energy. Lab tests confirmed that the nanotubes generate heat when struck with a laser, and Miyako says the composite material heats faster than its two components would by themselves.

It also exhibits high electrical conductivity and can also be used to make it easier to replicate DNA. *Morpho* wings contain layers of scales that make their surface superhydrophobic and self-cleaning. Miyako exploited this feature to initiate a method of DNA replication where drops of enzyme solution are laser-heated on the nanotube hybrid's surface. he nanocarbon network stops the aterial from absorbing the DNA, le the wing's water-shedding ability moves the drop away from the laser so that the process can be rapidly repeated.

R.Karthika, III BE ECE

Accident Prevention

In the current scenario the world is plagued by accidents which are primarily due to human errors in judgment. These accidents can be avoided if only there was a mechanism to alert the driver of approaching danger. This can be done by monitoring the distance between nearby cars and alerting the driver whenever the distance becomes too short. We propose the use of Bluetooth Technology by which we can check the speed of the car whenever it comes dangerously close to any other vehicle up front, thereby saving very many lives.

Since Bluetooth devices are capable of communicating with eight other devices simultaneously we can monitor and check the speeds of up to eight cars simultaneously, thus preventing accidents. If we have two Bluetooth enabled devices in two cars the devices automatically communicate with each other when they come in the range of up to 100 meters of each other. The range is dependent on the power class of the product. Power transmission rates vary in many Bluetooth devices depending upon the power saving features available in a particular unit, bandwidth requirements, transmission distance.

P.Lakshmi Narayanan, II BE ECE

Cheap Battery Can Store Energy for a Rainy Day

Power harvested from the Sun and wind is pouring into electricity grids by the gig watt. That makes it ever more important to find an efficient and convenient way to store renewable energy for those times when the breeze dies or the skies cloud over.

Flow batteries work by pumping different chemical broths over two electrodes separated by a membrane. The chemicals exchange protons across the membrane and shuttle electrons around the circuit that connects the electrodes, which discharges the battery. Reversing the reaction recharges the cell.

The big advantage of flow batteries is that the chemicals can be stored in tanks outside the battery assembly. Increasing capacity is simply a matter of building larger tanks, making flow batteries particularly suitable for large-scale energy storage.

Using a system no bigger than the 2,000-liter heating-oil tanks that are already installed in many homes is possible to store a day of solar energy, and power your home in the evening.

S.Rohitha, II BE ECE

The Kindness Hack

Researchers at Wharton, Yale and Harvard have figured out how employees feel l pressed for t force them to help others. According to a recent study, giving workers menial tas or, surprisingly, longe breaks actually lea them to believe th they have less ti while having them to a sick child, for i

makes them feel more in control and —willing to ommit to future engagements despite their busy schedules.‖ The idea is that completing an altruistic task increases your sense of productivity, which in turn boosts your confidence about finishing everything else you need to do.

K.Arun prakash, IV BE ECE

3-D Printing – „Modern Manufacturing & Rapid Prototyping"

3D printing is a computer aided, additive manufacturing process in which a solid part is created from its CAD (Computer Aided Design

The CAD model produced by 3D modelling software applications such as CATIA, Solidworks, Pro-Engineer, UG, etc. is first sliced into layers by various other software applic tions. The 3D printer then pro duces the cross section of t part and stacks it layer by lay to produce the finished real world replica of the intended CAD model.

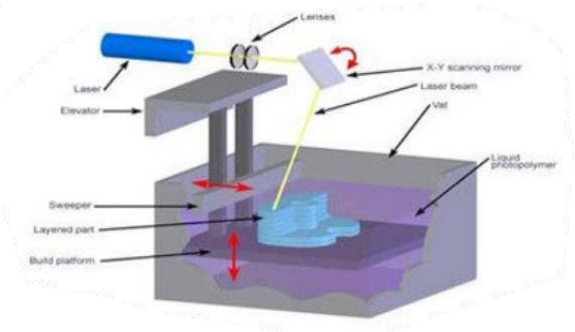
HOW IT WORKS ?

This is one of the earliest technologies to be used as a prototyping technique and was patented by scientist and engineer Chuck Hull in 1986. It consists of a vat of photopolymer resin on a movable platform which moves in the Z-direction (up and down). The UV laser cures the 2D layer producing the cross section. After one layer is completed, the platform moves down by the Z-thickness value to fabricate the next layer. Therefore the X-Y coordinates actuate the UV laser whereas the Z coordinate is controlled by the platform. The UV light causes the photopolymer to harden exactly at the point where the light contacts the surface. The photopolymers can be epoxies, vinyl ethers or acrylates. The finished part is rinsed and support parts removed either manually

resoluti curacy finished v e r close t t h e C A D model a engine g u a r a n t e e i n g companies to supply their best product in the least time possible. Industrial applications include the sectors of aerospace, automotive, armaments, consumer electronics, medical and surgical equipment, toys and many other large scale production sectors.

The SLA process although it being a success in mass production and large scale industries, are very expensive or the small scale and pernal home based applications.

A more commercialized method of the liquid based 3D printing process is the Inject based liquid process (Objet Polyjet by Objet Geometries ltd.) w



c A with material jet printing. A thin layer of photopolymer resin is sprayed onto a tray which is simultaneously exposed to a UV laser curing source. Sometimes instead of a heating source, a cooling source can cause the solidification (water cooled to ice), which is the case of the Rapid Freeze Prototyping Process.

Sivaram Prabhu, III BE ECE

World" s Largest Solar-Powered Boat Completes Its Trip Around The World

On September 27th of 2010, the world's largest solar-powered boat-the TURANOR planet solar-set out from Monaco on a quest to become the first boat to sail around the world using nothing but the power of the Sun. A crew of five piloted the 31-meter (102-ft) long, 15-meter(49-ft) wide vessel, which covered in 537 square meters(5,780 sq ft) of solar panels.

These provide power to four electric motors(to located in each hull),that have a maximum output 0f 120Kw and can propel the boat to a speed of 14knots.It is constructed mainly of a light yet durable carbon fiber –sandwich material.

Micro Submarines May Help Cleanup Oil Spills

If anything good came out of the 2010 Gulf of Mexico oil spill, it was that it got people thinking about technologies for cleaning up future spills. While things like magnetic soap, nanosponges, and autonomous robots are all in the works, a group of scientists recently announced the results of their research into another possibility – oil droplet-gathering microsubmarines.

The magnetically-guided —submarines‖ are actually based on existing microtube engines, that were developed to transport and deliver medication within the human body. Each of the nano machines is about eight micrometers long-approximately ten times smaller than the width of a human hair- and has an open, funnel-like front end .They are powered by an inner layer of hydrogen peroxide, which reacts with the surrounding liquid to produce jets of bubbles, which shoot out the back of the engines to rapidly propel them forward.

The group of American and Spanish researchers, led by the University of California-San Diego's Prof. Joseph Wang, applied a super hydrophobic coating to the gold outer surface of these machines. This water-repellant skin lets them to slip through the water easily, while at the same time allowing them to absorb any oil droplets that they encounter.

In laboratory tests, the microsubmarines were turned loose in water samples that were contaminated with olive oil and motor oil. The results were promising, in that the subs were able to collect and transport oil droplets. Needless to say, cleaning up oil spills in the open ocean would be another matter. Scores of the subs would be needed, and the scientists suggest that they might have to be powered by an external source, such as electrical or magnetic fields.

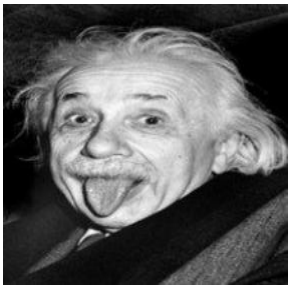
C.Malarvizhi, IV BE ECE

Political Physics

After Rahul Gandhi used the term —escape velocity‖ , Physics has come back to politics. It should be noted that this is not the first time physics has been used in politics. Newton's third law has often been used, but thanks to Shri Rahul Gandhi, now the political discourse is more educated.
Here are 12 scientific terms from high school physics textbooks explained in political terms

Absolute Zero: The losses due to various scams.

Atom *(Neutrons, Protons, and Electrons):* In a core group of a party, protons are the high command having real power e.g. Rahul Gandhi and Sonia Gandhi, neutrons help them bind together e.g. Manmohan Singh, and Electrons move around this nucleus e.g. everyone else in the Congress party. In case of BJP, Advani and Modi are protons, Rajnath Singh is a neutron, and electrons are talking to the sources.



Alternating Current: In political terms this is found in Tamil Nadu, which is ironically facing power shortages. This happens when DMK and AIADMK take power alternatively.

Big Bang Theory: A belief that you can create something out of nothing if you shout loudly.

Black Hole: Jan Lokpal, from which even light can't escape if found to indulge in corruption.

Centrifugal Force: It is the —fictitious‖ force that appears to push a rotating body away from the center. It is truly fictitious and absent when Congress is concerned i.e. the leaders rotating around the Gandhi family feel no force that pushes them away from the family. Whereas in BJP it is a real force, LK Advani confirmed it when Narendra Modi was brought to the center.

Escape Velocity: The speed of scamming at which you attain a velocity that can take you out of the gravitational field of the law i.e. the law can not pull you back and you can only go higher and higher.

Inelastic Collision: When the collision i.e. alliance of two political parties fails to conserve their respective kinetic energies, it's known as inelastic collision. For example, two parties with 12 and 8 Losk Sabha seats respectively join hand and win 3 Lok Sabha seats together after fresh elections.

Kinetic Energy: When you walk out of the parliament session, this act of being in motion creates kinetic energy. As you will read in the text books, this energy is dependent upon motion, even no-confidence motion. This energy is later used in shouting slogans.

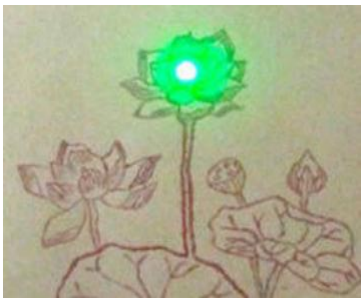
Vacuum: It is a political synonym for governance and discourse.

S.Santhenie, III BE ECE

Metal Ink Could Ease Way Toward Flexible Electronic Books, Displays

Scientists reported the development of a novel metal ink made of small sheets of copper that can be used to write a functioning, flexible electric circuit on regular printer paper.

Wenjun Dong, Ge Wang and colleagues note that the tantalizing possibilities of flexible electronics, from tablets that roll up to wearable circuits

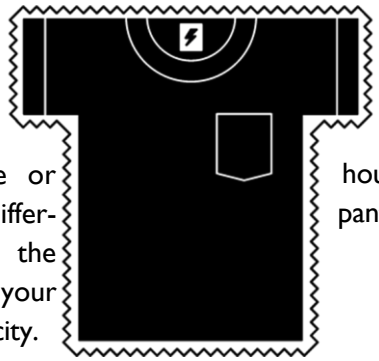


woven into clothes, have attracted a lot of attention in the past decade. But much of the progress toward this coming wave of futuristic products has entailed making circuits using complicated, time-consuming and expensive processes, which would hinder their widespread use. In response Dong and Wang's group decided to try copper nanosheets, which are inexpensive and highly conductive, as a flexible circuit ink.

They made copper nanosheets coated with silver nanoparticles in the laboratory and incorporated this material into an ink pen, using it to draw patterns of lines, words and even flowers on regular printer paper. Then, to show that the ink could conduct electricity, the scientists studded the drawings with small LED lights that lit up when the circuit was connected to a battery. To test the ink's flexibility, they folded the papers 1,000 times, even crumpling them up, and showed that the ink maintained 80 to 90 percent of its conductivity.

G.Nivilah Jerishma, II BE ECE

Electric Cloths



Physicists at Wake Forest University have developed a fabric that doubles as a spare outlet. When used to line your shirt or even your pillowcase or office chair it converts subtle differences in temperature across the span of the clothing (say, from your cuff to your armpit) into electricity. And because the different parts of your shirt can vary by about 10 degrees, you could power up your MP3 player just by sitting still. According to the fabric's creator, David Carroll, a cellphone case lined with the material could boost the phone's battery charge by 10 to 15 percent over eight hours, using the heat absorbed from your pants pocket.

T.Mohanraj, IV BE ECE

See Through Walls with Wi-Fi!

A technology that lets you see behind walls could soon be built in to your cell phone.

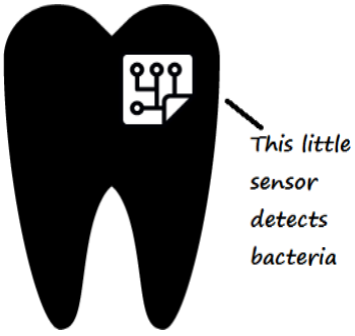
Wi-Vi, a demonstration of a technology that uses Wi-Fi to allow a viewer to "see" a person moving behind a wall. (Wi-Vi - "Wi-Fi" and "vision.")

Wi-Fi signals are typically information carriers between a transmitter and a receiver. Wi-Fi can also extend our senses, enabling us to see moving objects through walls and behind closed doors. we can use such signals to identify the number of people in a closed room and their relative locations. We can also identify simple gestures made behind a wall, and combine a sequence of gestures to communicate messages to a wireless receiver without carrying any transmitting device. . First, it shows how one can use MIMO interference nulling to eliminate reflections off static objects and focus the receiver on a moving target. Second, it shows how one can track a human by treating the motion of a human bodyas an antenna array and tracking the resulting RF beam.

G.Mathivarma, II BE ECE

The Teeth That Think

Scientists at Princeton and Tufts are working on a superthin tooth sensor (a kind of temporary tattoo) that sends an alert when it detects bacteria associated with plaque buildup, cavities or infection. It could also notify your dentist, adding an extra layer of social pressure to make an appointment. The sensor may have wide-ranging use: the researchers have already used it to identify bacteria in saliva associated with stomach ulcers and cancers. While the sensor won't last long on the surface of a well-brushed and flossed tooth, the sensors will be inexpensive enough that you can replace them daily.



C.Divakar, IV BE ECE

Smart Shoe

A High-tech running shoe with sensors and microelectronics has been developed in Germany which, according to its developers, could help reduce the number of running related injuries.

The electronics are integrated into the sole of shoe to help measure the biomechanical data of the athlete and also evaluates the runners form in real time. Pulse rate watches and chest straps record only vital signs like breathing and heart rate. The running shoe medically evaluates and monitors training while jogging. It informs the runner of incorrect foot position, asymmetric loading or warns of exhaustion or overload. The pair of shoes can also be charged by simply hooking them up to the charger.

Selvapriya, III BE ECE

Emerging Cellular Technologies

Today's telecommunications market segment is becoming increasingly global and major players are emerging in this market struggling to take a dominant position. This increasingly global business environment has been driving, and will continue, the globalization of technologies.

Regulators, Network Service Providers and equipment suppliers all aim at: Satisfying the telecom market demands based on the promise of providing the best services to end user. Stimulating economy to produce many useful goods and services. The idea behind broadband communication system is that, whether over wires or radio waves, all types of information can travel via the same media. Development in telecommunications is changing our lives very fast and has implications on traditional industries.

Technology Globalization

Today's telecommunications market segment is becoming increasingly global and major players are emerging in this market struggling to take a dominant position.

- This increasingly global business environment has been driving, and will continue doing so, the globalization of technologies, and in particular, radio access technologies.
- The selection of technology is likely to have an impact on the global strategy of each particular cellular operator

B.Ashwin Deepak, II BE ECE

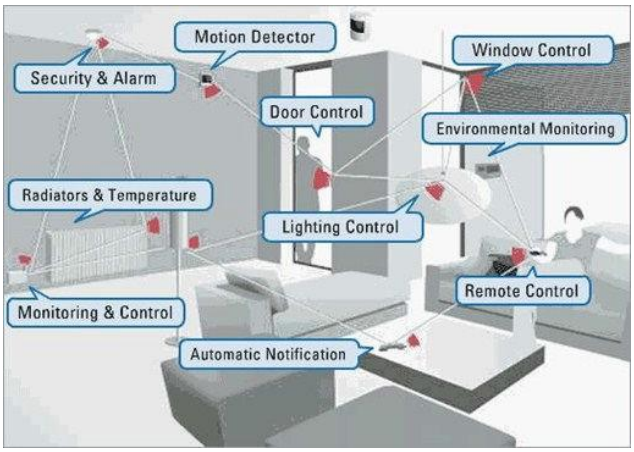
Zigbee Technology

The zigbee communication is a communication technology to connect local wireless nodes and provides high stability and transfer rate due to data communication with low power.

This technology suggests the grouping method that makes it possible to perform wide range data transferring depending on the node signal strength in zigbee node and analyse the suggested algorithm through simulation. Based on IEEE 802.15.4 Low Rate-Wireless Personal Area Network (LR-WPAN) standard, the Zigbee standard has been proposed to interconnect simple, low rate and battery powered wireless devices

ZigBee is a low-cost, low-power, wireless mesh networking standard. The low cost allows the technology to be widely deployed in wireless control and monitoring applications, the low power-usage allows longer life with smaller batteries, and the mesh networking which promises high reliability and larger range. ZigBee has-been developed to meet the growing demand for capable wireless networking between numerous low power devices.

Zigbee technology will be formed within next two to three years a minimum of 100-150 Zigbee chips would be present in it. It would cost only a 5$ for single chip. ZigBee is designed for remote controls and sensors, which are very many in number, but need only small data packets and, extremely low power consumption for longer life. The ZigBee Alliance targets applications across consumer, commercial, industrial and government markets worldwide. It is likely that ZigBee will increasingly play a vital role in the future of computer and communication technology.



T.Surendar, II BE ECE

Did you know that...

All the blinking in one day equates to having your eyes closed for 30 minutes.

The most commonly forgotten item for travelers is their toothbrush.

You burn more calories sleeping than watching TV.

Technology That Allows Users to See Through Walls and Melt Objects

Researchers from the University of South Australia in collaboration with Nokia started working on one of their latest inventions that would make it possible for users of cell phones to see through walls.

This invention makes use of augmented reality (AR), being able to overlay graphics on top of real the video. The AR system comes in three types: X-ray Vision, Meltvision and Distortvision.

Generally, users prefer Meltvision over X-ray vision, due to a more appealing look, where structures appear to melt away. As for Distortvision, it changes the mobile video picture so that the objects, that cannot be seen "bent" so the person could see them in the image.

It would be interesting to note that the researchers have also been working on an invention that would make it possible for users to see and sense virtual objects. The new technology is called Visuo-Haptic Augmented Reality and it allows an individual to manipulate a 3D object by making use of a head mounted screen and touch-based gadgets.

K.Vignesh, IV BE ECE

Solution

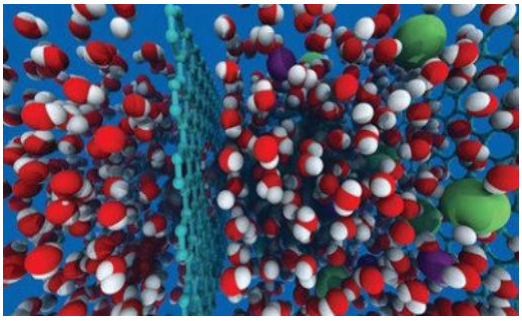
Puzzle It!

The oldest pirate will propose a 98 : 0 : 1 : 0 : 1 split, in other words the oldest pirate gets 98 coins, the middle pirate gets 1 coin and the youngest gets 1 coin.
Let us name the pirates (from oldest to youngest): Alex, Billy, Colin, Duncan and Eddie.
Working backwards:
2 Pirates: Duncan splits the coins 100 : 0 (giving himself all the gold). His vote (50%) is enough to ensure the deal.
3 Pirates: Colin splits the coins 99 : 0 : 1. Eddie will accept this deal (getting just 1 coin), because he knows that if he rejects the deal there will be only two pirates left, and he gets nothing.
4 Pirates: Billy splits the coins 99 : 0 : 1 : 0. By the same reasoning as before, Duncan will support this deal. Billy would not waste a spare coin on Colin, because Colin knows that if he rejects the proposal, he will pocket 99 coins once Billy is thrown overboard. Billy would also not give a coin to Eddie, because Eddie knows that if he rejects the proposal, he will receive a coin from Colin in the next round anyway.
5 Pirates: Alex splits the coins 98 : 0 : 1 : 0 : 1. By offering a gold coin to Colin (who would otherwise get nothing) he is assured of a deal.
(Note: In the final deal Alex would not give a coin to Billy, who knows he can pocket 99 coins if he votes against Alex's proposal and Alex goes overboard. Likewise, Alex would not give a coin to Duncan, because Duncan knows that if he votes against the proposal, Alex will be voted overboard and Billy will propose to offer Duncan the same single coin as Alex. All else equal, Duncan would rather see Alex go overboard and collect his one coin from Billy.)

Purifying Water With Nanotech

Globally, water is abundant, but most of it is in the oceans, where it's unsuitable for drinking.

Power engineers are developing a filtration material made of a sheet of nanoporous graphene. The holes in the graphene—a one-atom thick form of carbon—are small enough to block salt ions while letting water molecules through.



Bacteria Be Gone

The process in which the bacteria such as E. coli can be captured and killed on-site and the carbon nanotubes can be reused later on that reduces the cost.

The carbon nanotubes of nanometers wide, are essentially smooth pipes of water-repelling graphite that simultaneously attract bacteria.

On using clusters of nanotubes testing a vial of water to remove waterborne bacteria,that included both the gram-positive and gram-negative bacterial strains. Gram-positive bacteria are stained dark blue or violet by gram staining. This is in contrast to gram-negative bacteria, which cannot retain the crystal violet stain, instead that appears as red or pink. These two types were chosen because the properties of their surfaces could affect the interaction between the bacteria and the nanotubes.

The system consists of large clusters of multiwalled carbon nanotubes (MWNTs) to capture the bacteria and a magnet for attracting the nanotubes. The contaminated water is placed in the vial along with the MWNTs.

A cubic magnet of 2.54 cm on a side made of the rare earth element neodymium, is placed close to the vial's outer wall. In less than five minutes, the MWNT clusters were completely separated from the bulk solution. No MWNT debris or bacteria remains in the residual water.

Thus the results demonstrate the excellent potential of MWNT clusters, as a highly effective bacterial adsorbents of any type.

S.Yogapriya, II BE ECE

Did you know that...

Australia was originally called New Holland.

If you counted 24 hours a day, it would take 31,688 years to reach one trillion.

Camel's milk doesn't curdle.

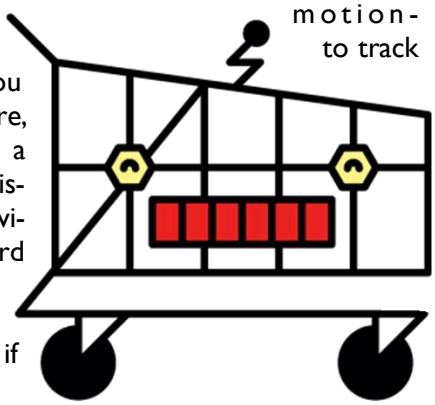
Gi-Fi Technology

For many years, cables ruled the world. Optical fibers played a dominant role because of its higher bit rates and faster transmission. But the installation of cables caused a greater difficulty and thus led to wireless access. The foremost of this is Bluetooth, which can cover 9-10metres. Wi-Fi followed it having coverage area of 91metres. However, the standard's original limitations for data exchange rate and range, number of channels, high cost of the infrastructure have not yet made it possible for Wi-Fi to become a total threat to cellular networks. Gi-Fi will help to push wireless communications to faster drive. Gi-Fi (Gigabit Fidelity) or Gigabit Wireless is the world's first transceiver integrated on a single chip that operates at 60GHz on the CMOS process. It will allow wireless transfer of audio and video data up to 5 Gigabits per second, ten times the current maximum wireless transfer rate at one-tenth of the cost, usually within a range of 10 meters. It utilizes a 5mm square chip and a 1mm wide antenna burning less than 2 mw of power to transmit data wirelessly over short distances, much like Bluetooth.

S.Manokaran, II BE ECE

The Mind-Reading Shopping Cart

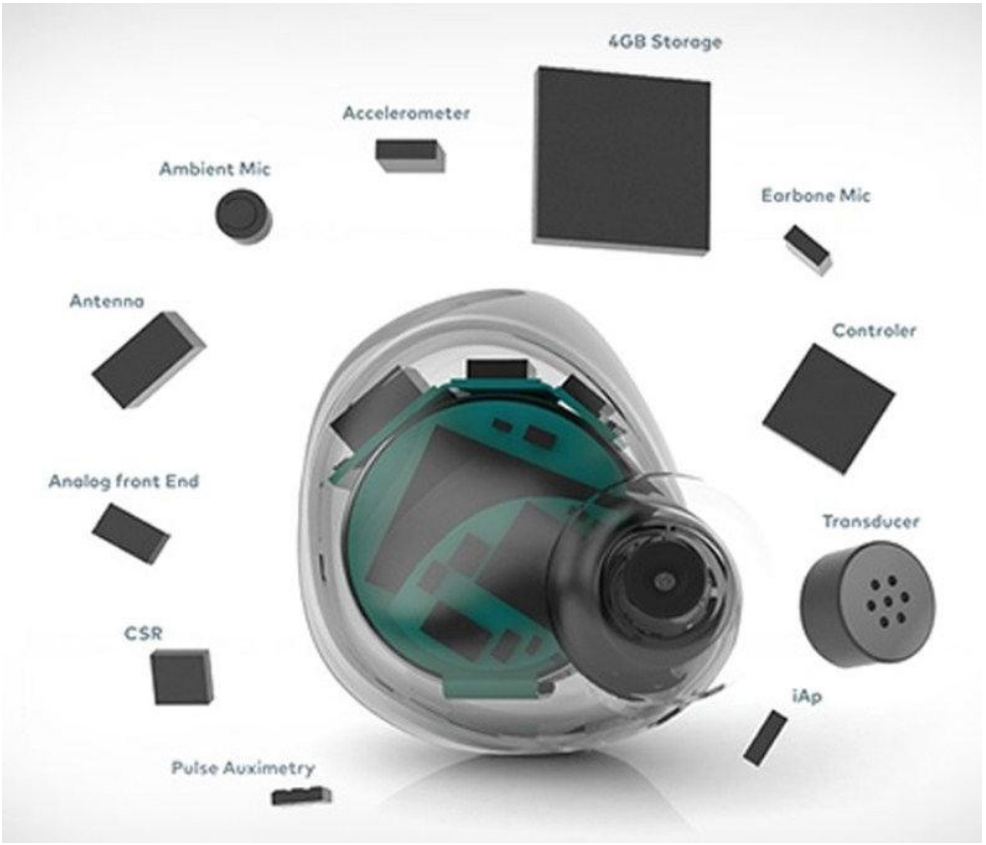
In February, Chaotic Moon Labs began testing a robotic shopping cart that acts a bit like a mind-reading butler. To start it up, you can text message the cart's built-in tablet computer. Now it knows who you are and what you need for dinner. The cart uses Microsoft's Kinect motion-sensor technology to track and follow you through the store, pointing you — in a synthy voice reminiscent of a G.P.S. navigator — toward products on your list. The system will also warn you if you've added something that violates your dietary restrictions. Still only a prototype, the cart isn't nearly as nimble as its human-powered cousin, but it does have one main advantage. Items you add to the cart can be automatically scanned, and you can finalize your purchase from the device, skipping the checkout line entirely.



R.Silambarasan, IV BE ECE

The Dash - World's First Smart Earphones

German sound and software company BRAGI has unveiled the world's first smart ear buds - "The Dash". This seems to be a big leap in the earphone technology. The Dash is a wireless pair of completely discrete buds that can work with a connected smartphone or completely on their own via an internal 4 GB storage for loading up your own songs directly. It uses Bluetooth 4.0 (with aptX) connectivity for streaming audio from your smartphone.



It crams in an IR LED, optical sensor, 3-axis accelerometer, ambient mic and ear-bone mic. Each bud contains 100mAh battery, which should be good enough for 3 hours of use and also it is water resistant.

Dash comes with 3 different sleeves that offers you an option to pick the fit that's right for your ears. Silicon sleeves come in small, medium and large to ensure that your wireless ear buds don't fall right out of your head. The on-board sensors can track one's heart rate, oxygen saturation, steps, distance traveled, speed, energy spent using in-built health and body sensors. The ear-bone mic eliminates background interference and acts as a full fledged activity tracker and can also be used for making calls. The transport audio feature allows to hear what's going around you; for instance when you're cycling or running.

The left bud controls your activity monitoring while the right one manages the audio controls, including audio volume and playlists selection. Without a phone the ear buds can still monitor and track fitness and performance and that information can be downloaded to a supporting smartphone app later. If you're a hardcore jogger or just somebody who wants to listen to music wirelessly the Dash seems perfectly designed for you. So what are your views regarding these pair of earphones, which fits inside your ear, pack MP3s and fitness tracking? Share with us in comments below.

R.Rajeshwari, IV BE ECE

Bringrr - A Mobile Charger For Car Keeps Track Of Your Belongings

Do you keep forgetting or misplacing things? Well, check out Bringrr, a mobile charger for your car which will remind you if you've not carried things like your phone, wallet, briefcase, etc. When you start your car, the Bluetooth enabled charger will search for your phone and other items. And if it doesn't find

your phone, Bringrr will notify you with a flash and sound. To provide more functionality, it also contains BringTags and Bringrr App.

BringTags comes in use when you want make an item traceable by Bringrr. It is a circular tag which emits a Bluetooth signal traceable by Bringrr. The Bringrr will do a Bluetooth search of all the BringTags and if any item is not there, then a notification will pop on your phone mentioning the items which you have left behind. The BringTag consist of an interchangeable battery which last for a year. It also uses Bluetooth LE (Bluetooth low energy), which helps in reducing the battery consumption of your smartphone.

Bringrr App is available for iOS, Android and even Google Glass. The Bringrr App syncs with your phone's calendar and will remind you to bring your tagged items. The app also helps in tracking down tagged items which are misplaced. Within a range of 50-150ft, the app will guide you towards the item's location. And if you are still unable to find it, the BringTag's in-built speakers can be activated to find it by sound. The app also saves the last GPS position of the tagged item so you can easily find it even when it's not in reach. If you still can't find your item and you think you've lost it, you can simply mark the item as 'missing' and the entire Bringrr community will be discreetly searching for your item. Once it gets within the range of another Bringrr, you will receive a notification of its location. All of this is done very securely and anonymously.

Currently, the system works only in cars. The creators will be developing it for people who use different means of transport. Shipping will begin in the summer and Bringrr will cost around $29 (around Rs.1800) and each BringTag will cost around $19 (around Rs.1175).

M.Sureshkumar , III BE ECE

Concern for man and his fate must always form the chief interest of all technical endeavors. Never forget this in the midst of your diagrams and equations. - **Albert Einstein**

Men are only as good as their technical development allows them to be. - **George Orwell**

Without natural gifts technical rules are useless. - **Quintilian**

The technical is not just the machinery. The technical is a disposition to life. - **Leon Kass**

Try to be like the turtle - at ease in your own shell. - **Bill Copeland**

New Laser For Faster Communication Developed By Caltech University

With the ever-increasing demand for faster internet, researchers from the California Institute of Technology (Caltech) have developed a new laser which increases the rate of transmission in an optical -fiber network. The work done is a five-year effort by researchers Amnon Yariv, Christos Theodoros Santis, Scott T. Steger, Yaakov Vilenchik and Arseny Vasilyev. The study was published in the Proceedings of the National Academy of Sciences.

Now, light has a potential of carrying huge amount of data and is one of the key features of an optical-fiber network. But even today its full potential could not be utilized. For that the laser light has to be spectrally pure – which means it has to be close to a single frequency. Hence, researchers have been striving to create a new laser that can come close as possible to emitting a single frequency. The laser used in today's worldwide optical-fiber networks is known as distributed-feedback semiconductor (S-DFB) laser which was developed in the mid 1970. The reason why S-DFB laser's is still being used is because, at that time, the laser had an unmatched spectral purity. With the laser's increased spectral purity, larger bandwidth and longer transmission distance is possible in optical fibers.

The high spectral purity in the S-DFB laser was achieved by incorporating nanoscale corrugation within the multi-layered structure of the laser. This surface acted as a filter, removing all the false —noisyll waves which can contaminate the ideal wave frequency. Yariv had received the 2010 National Medal of Science with the main reason being that the old S-DFB laser had been successfully used for 40-years in optical communications. But the laser can now no longer satisfy ever-increasing demand for faster bandwidth.

The old S-DFB laser consist of III-V semiconductors which convert electrical current into light. But the III-V semiconductor is also a strong light absorber and can thus decrease the spectral purity. Hence, the search for a different solution began. The new laser still uses the III-V material but added a layer of silicon, which does not absorb light. The silicon layer acts as a light concentrator, which pulls the newly generated light away from the light absorbing material. The newly achieved high spectral purity is a 20 times narrower range of frequencies than possible with the old S-DFB laser. Originally, information is transferred by rapidly turning the laser on and off. But now engineers are adopting a new method called coherent phase communication, to impress the data on laser beams that no longer requires this "on-off" technique.

In coherent phase communications, data resides in the small delays in the arrival time of the waves. But the number of possible delays, is limited so as to maintain the spectral purity of the laser beam. The purity can never be perfect but with the new laser, the researchers have tried to make the purity as flawless as possible.

Santhosh Kumar, III BE ECE

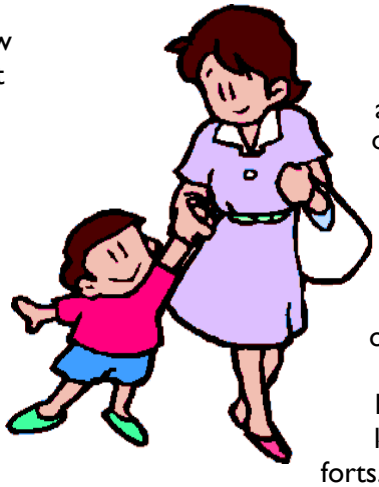
My Mom Only Had One Eye

My mom only had one eye. I hated her… She was such an embarrassment. She cooked for students and teachers to support the family. There was this one day during elementary school where my mom came to say hello to me. I was so embarrassed.

How could she do this to me? I ignored her, threw her a hateful look and ran out. The next day at school one of my classmates said, —EEEE, your mom only has one eye!‖

I wanted to bury myself. I also wanted my mom to just disappear. I confronted her that day and said, —If you're only gonna make me a laughing stock, why don't you just die?‖

My mom did not respond… I didn't even stop to think for a second about what I had said, because I was full of anger. I was oblivious to her feelings.



I w t house, and have not with her. So I s t al hard, got a ch o go abroad to stu

Then, I got married. I bought a ouse of my own. I kids of my own. I happy with my life, kids and the comforts. Then one day, my Mother came to visit me. She hadn't seen me in years and she didn't even meet her grandchildren.

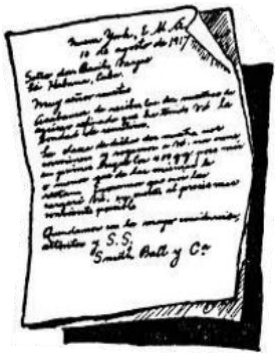
When she stood by the door, my children laughed at her, and I yelled at her for coming over uninvited. I screamed at her, —How dare you come to my house and scare my children!

GET OUT OF HERE! NOW!!!‖

And to this, my mother quietly answered, —Oh, I'm so sorry. I may have gotten the wrong address.‖ – and she disappeared out of sight.

One day, a letter regarding a school reunion came to my house. So I lied to my wife that I was going on a business trip. After the reunion, I went to the old shack just out of curiosity.

My neighbors said that she died. I did not shed a single tear. They handed me a letter that she had wanted me to have.



—My dearest son,

I think of you all the time. I'm sorry that I came to your house and scared your children.

I was so glad when I heard you were coming for the reunion. But I may not be able to even get out of bed to see you. I'm sorry that I was a constant embarrassment to you when you were growing up.

You see……..when you were very little, you got into an accident, and lost your eye. As a mother, I couldn't stand watching you having to grow up with one eye. So I gave you mine.

I was so proud of my son who was seeing a whole new world for me, in my place, with that eye.

With all my love to you,

Your mother.‖

M.Deepika, IV BE ECE

Sonnet Corona

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Value of Time

If you want to know the value of year,
Ask the student who lost an academic year;
If you want to know the value of a month;
Ask a mother who gave birth to carcass;
If you want to know the value of a week,
Ask the editor of weekly magazine;
If you want to know the value of a day,
Ask a business man who lost in his contract;
If you want to know the value of an hour,
Ask the patient suffering from deadly incurable disease;
If you want to know the value of a minute,
Ask a person who had missed his bus;
If you want to know the value of a second,
Ask a person who had just escaped from accident.

A.Vimala, II BE ECE

I'm sorry, MOM!!

Running moist are my eyes,
The sense of guilt staring the skies,
As my forlorn heart weighs,
Ways to plead forgiveness.

In woods that my heart is,
The search is for the eternal bliss,
That stands shattered to mess,
By this outburst of tantrum.

Hurting mom for no reason,
My heart heavy with the guilt of treason,
Nervous am I, turning crimson,
For my silly act.

Pardon my folly, oh gentle,
Do relieve, my feeling belittle,
Do not let my conscience dwindle,
Crying is your son, "I'm Sorry!"

P.K.Vanmeeganathan , III BE ECE

"Music expresses that which cannot be put into words and that which cannot remain silent"
— Victor Hugo

"A poem begins as a lump in the throat, a sense of wrong, a homesickness, a love-sickness."
— Robert Frost

"Poetry is eternal graffiti written in the heart of everyone."
— Lawrence Ferlinghetti

Nature and Earth

I don't think it was ever known,
The real beauty Nature as shown;
For to Nature, many a time people pray,
But hate to hear a donkey bray;
For a beautiful scene of Nature today,
You must search in a stack of hay;
For in this world it has become so rare,
That soon the Earth will be quite bare.
No oceans, no lands, no seas,
No buzzing of the sweet honey-bees.
Everything will be lost,
Even the winter frost.
There shan't be birds to sing,
No trees for children to swing;
No mighty winds shall blow,
And no green plants shall grow.
Prevent pollution of air,
Show Nature some care;
Decrease your garbage bin,
Don't fill it to the brim;
Factories! Please stop fuming;
People! Reduce your consuming;
Protect the ozone layer;
Man, don't be an animal-slayer;
Don't cut down trees;
And don't harm the breeze,
Don't dump the seas with dirt,
And never forget "ITS YOUR EARTH!!"...

G.Nivilah Jerishma, II BE ECE

The True Friendship

Friendship is a precious gift,
It's a sincere tiny seed
When planted in a heart
It blooms to fill a lovely heart's needs.

The kind word that we say
The thoughtful art we do
Are like a perfect bell
Which sings to the perfect time.

The love we see in someone's eyes,
A bond of trust among two hearts
It chants the sonorous and joys
For friendship understands

True friendship more than a word
A jewel which is rare
To keep and cherish deep within
And guard it safely there...

A.Vimala, II BE ECE

My Old Friend

I could still remember
The first day we met
In front of our school gate
That begins with a smile
Just a smile
Without knowing each other
That continues with endless talks
Still it was amazing
Since it was the first day

Then starts our funny moments
Sleepless night chats
Sleeping class hours
Teasing class mates
Boring home works
I could still remember
The days passed
Giving me the heaven feel!!!!

You were there in every stages
Strengthening my hopeless minds
You were there
When no one was to care
Strengthening my hopeless minds
And I'm sure
That is why the great things were done by me

You were still there
When I was in the easy chair
There continues our endless chats
I could still remember
As everlasting memories in heart

But I'm alone here
Sitting in your graveyard
Without knowing the reason
Why you left me
Without knowing the reason
Why I'm still here
Without knowing
Where are you MY OLD FRIEND!!!

L.Sujitha Singh, II BE ECE

Fantabulous Five Feelings (FFF)

I cause people DISTRESS,
I make them lose them PATIENCE!!
In situation when each soul has a STRESS,
Within the heart lies a NUISANCE,
And I am the PAIN;

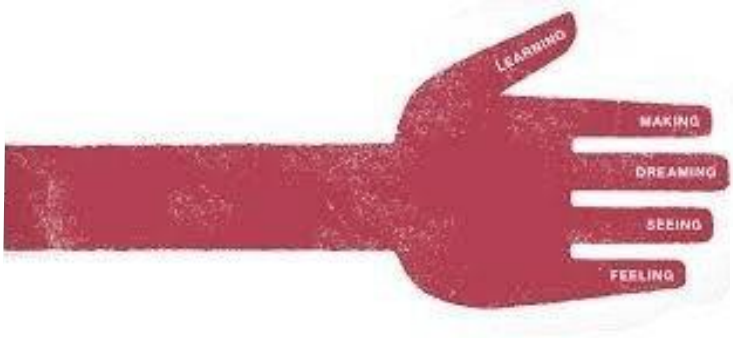
I may not be a NUISANCE,
But I can create a NEW SENSE!
To make you feel EXCITED,
Beneath the woods we have most CITED,
And I am the HAPPINESS;

I am here for TWO!
To amplify HAPPINESS and to purify the PAIN!
Amongst the midst of VAIN,
So let's all get drenched in the RAIN,
And I am the JOY;

I am the most powerful!
Not everyone can own me!
I can be acquired only after a long WAIT,
For those who have a perfect INSIGHT,
And I am the PATIENCE;

I am very special above ALL!
I lie scattered everywhere and owned by EVERYONE,
But the souls who choose me exactly can stand TALL!
Mothers shower this perfectly better than NO ONE!
I am the LOVE!!

N.Surya Kiran, II BE ECE



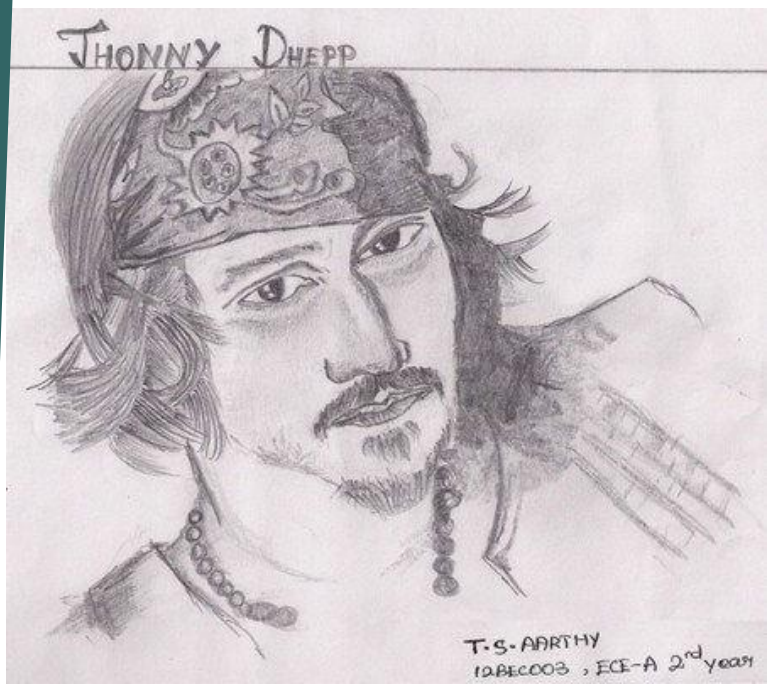
The 'dissatisfied employed' have remarkably greater psychological issues than even the unemployed.

Department of ECE

Sound Doodles

Ylectraze v2.0

T.S.Aarthy, II BE ECE



S.Mallika, II BE ECE

S.Rohitha, II BE ECE

"Painting is poetry that is seen rather than felt, and poetry is painting that is felt rather than seen."

— Leonardo da Vinci

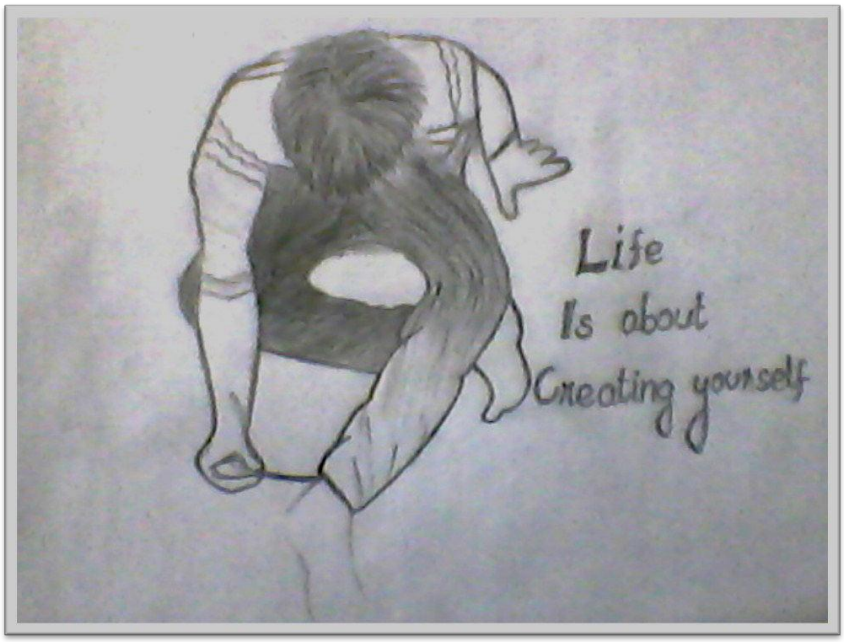
"Every portrait that is painted with feeling is a portrait of the artist, not of the sitter."

— Oscar Wilde

"I dream my painting and I paint my dream."

— Vincent van Gogh

T.Indumathi , II BE ECE



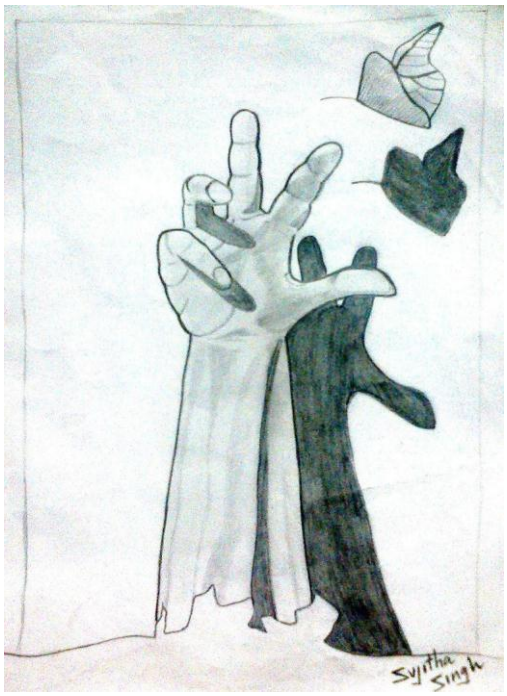
S.Savitha, IV BE ECE

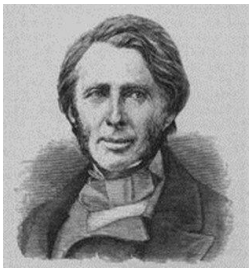
Keerthi Murugan, BE ECE

Meenachi, II BE ECE

N.Yogesh, IV BE ECE

L.Sujitha Singh, II BE ECE





"All art is but dirtying the paper delicately."

— John Ruskin

Spectrum Activities

S.No	Date	Events
1	31.08.2013	Inauguration of Association followed by a Guest Lecture on "Opportunities in Core Industries" by Mr. A Mohammed Azad, CEO, Reach Information and Communication Systems, Coimbatore.
2	06.09.2013	Technical Quiz " TECHNOQUIZ"
3	14.09.2013	Guest Lecture on "Industrial Communications" by Mr. R.Jayakumar, Competency Manager, Rockwell Automations (P) Ltd. Bangalore.
4	05.10.2013	One-day Theory cum Practice Session on "NS2 and its Applications" by Mr.R.Thirukumar, R & D SAT INFO Systems, Coimbatore.
5	18.10.2013	Paper Presentation Contest for II Year ECE Students
6	26.10.2013	Paper Presentation Contest for III Year ECE Students
7	09.11.2013	One-day Theory cum Practice Session on "Embedded Software design using Keil IDE" by Dr.D.Sivaraj, AP/ECE, PSG College of Technology, Coimbatore.
8	27.01.2014	Guest Lecture on "Issues in Data Acquisition for Medical Images" by Dr.N.Tamilselvan, General and Laparoscopic Surgeon, Coimbatore Medical college and Hospital, Coimbatore.
9	04.02.2014	Eco-conservation awareness programme
10	20.03.2014	Association Valediction function

Inauguration of Association

Guest Lecture on"Opportunities in Core Industries" by Mr. A Mohammed Azad

Guest Lecture on "Industrial Communications" by Mr. R.Jayakumar

Guest Lecture on "Issues in Data Acquisition for Medical Images" by Dr.N.Tamilselvan

Technical Quiz " TECHNOQUIZ"

Eco-conservation awareness programme

One-day Theory cum Practice Session on "NS2 and its Applications" by Mr.R.Thirukumar

One-day Theory cum Practice Session on "Embedded Software design using Keil IDE"

IEEE STUDENT BRANCH 61631

S.No	Date	Events
1	22.07.2013	Inauguration and Guest lecture on "Opportunities and trends in electrical and computing sciences" by Dr.V.Ranganathan , Dean ICE and EIE.
2	31.07.2013	Guest lecture on "Arduino programming and Introduction to hardware" by Mr.Santhosh Singh, Research assistant (CECRI).
3	20.09.2013	Workshop on "Matlab and Simulink". (for IEEE members)
4	01.10.2013	Workshop on "Matlab and Simulink". (for non IEEE members)
5	11.10.2013	Intracollege paper presentation -Avalon'13
6	11.11.2013	Guest lecture on "IEEE and engineering in community services" by T.L.Prasanna Venkatesan, IEEE education service board
7	13.3.2014 - 14.3.2014	A National level conference—Conflatz'14

Inauguration of IEEE Student Branch

Guest lecture on "Arduino programming and Introduction to hardware" by Mr.Santhosh Singh

Intracollege paper presentation -Avalon'13

Workshop on "Matlab and Simulink"

Department of ECE

Co-curricular Activities

International Journal

S.No	Name	Journal Name	Paper Title	PP	Month
1	Jaishankar.U, Manuel Maria Bastin.S, Amoog.L	IOSR Journal of Electrical and Electronics Engineering (IOSR-JEEE)	Removal of High Density Salt and Pepper Noise along with Edge Preservation Technique	38-43	Jan-2014

International Conference

S.No	Students Name	Year	Conference	Place	Date
1	Jaishankar.U Manuel Maria Bastin.S Amoog.L	IV	International Conference on Advances in Engineering & Technology – 2014 (ICAET-2014)	Anjuman college of Engineering, Nagpur	8/1/2014 to 9/1/2014
2	Jaishankar.U Manuel Maria Bastin.S Amoog.L	IV	International Conference on Advanced Computing and Communication Systems (ICACCS -2013)	Sri Eshwar college of Engineering, Coimbatore	19/12/2013 to 21/12/2013

National Conference

S.No	Students Name	Year	Conference	Place	Date
1	B.Loganayaki S.P.Krishna kumar K.Gayathri	IV	National conference on Information Processing and Remote Computing - NCIPRC'14	PSG college of technology, coimbatore	27/2/2014 to 28/2/2014
2	D.Madhu Priyanga S.Azhagu priya T.S.B.Mathansurya	IV	National conference on Information Processing and Remote Computing - NCIPRC'14	PSG college of technology, coimbatore	27/2/2014 to 28/2/2014

Paper Presentation

S.No	Students Name	Year	Place	Awards/ Prize	Date of the Event
1	Sujithra.N Viniba.R	III	M.Kumarasamy College of Engineering	Participant	6/9/2013 to 7/9/2013
2	Viniba.R	III	Anjalai Ammal Mahalingam Engineering College	Participant	2/8/2013
3	G.B.Nivedha	III	Dr.Mahalingam College of Engineering and Technology	III	11/10/2013

Workshop

S.No	Student Name	Title	Venue	Date
1.	Karthik.M	Digital Image Processing	SNS College of Engineering	05.09.2013 –07.09.2013
2.	Manoj Karthik.D			
3.	Gowtham Raja,G			
4.	John Solomon.L			
5.	Muthu sambantham.S			
6.	Narayanan.T			
7.	M.Dinesh Kumar	Digital Signal Processing	Dr.Mahalingam College of Engineering and Technology	19.10.2013
8.	Archana.B			
9.	Anbukannan.V			
10.	Aravinthu Singh S			
11.	Hari Prakash S			
12.	Gayathri K			
13.	Kalaiselvan P			
14.	Gayathri M			
15.	Vadivel V			
16.	Anand S			
17.	Abishake E			
18.	Sabarish Kumaran V			
19.	Prithivi C S			
20.	Vaishnavi A			
21.	Santhine S			
22.	Sibi Krishna V			
23.	Shyamala Gowri V			
24.	Subha N			
25.	Saranya E			

26.	Snegal H	Digital Signal Processing	Dr.Mahalingam College of Engineering and Technology	19.10.2013
27.	Viniba R			
28.	Yaathave P			
29.	Vivek Sakthi A B			
30.	Uma Devi R			
31.	Gayathri K	Industrial Automation	Dr.Mahalingam College of Engineering and Technology	26.07.2013 - 27.07.2013
32.	Aravindh K			
33.	Padmanaban D			
34.	Gowtham R			
35.	Meiyazhagan P			
36.	Monika V			
37.	Marimuthu M K			
38.	Sudha R	Embedded Systems	Dr.Mahalingam College of Engineering and Technology	26.07.2013 27.07.2013
39.	Aravindhasamy M			
40.	Kasthuri S			
41.	C.S.Prithivi			
42.	Senthinathan M			
43.	Selva Kumar S			
44.	Sasi J			
45.	Vasanth M			
46.	P.K.Vanmeeganathan			
47.	A.B.Viveksakthi			
48.	S.Santhine			
49.	Sibikrishna.V			
50.	Prashanth K			
51.	Dhivakar.R	NS2 Applications	Sona College of Technology	27.09.2013 28.09.2013
52.	Mathivarma G	NSS Fire safety	Epitome Technologies, Bangalore	07.08.2013
53.	Suwedha R			
54.	Selvarani K			
55.	N.Selva Brindha			
56.	Nivveda.G.B			
57.	Lakshminarayanan.P			
58.	Abinaya.T			
59.	G.B.Nivveda	MATLAB	Dr.Mahalingam College of Engineering and Technology	20.09.2013
60.	T.S.Aarthy			
61.	M.R.Ashwin			
62.	T.Abinaya			
63.	M.Geerthana			

64.	Ashwin Deepak B	PCB Designing	Dr.Mahalingam College of Engineering and Technology	01.10.2013
65.	Dharani Raja G			
66.	Mathi varmaG			
67.	Kandhar Vishnu.U			
68.	M.Lavanya			
69.	M.Abirami			
70.	T.Indhumathi			
72.	E.Bhuvaneshwari			
73.	Lakshminarayanan.P			
74.	C.S.Prithivi	MATLAB	Dr.Mahalingam College of Engineering and Technology	09.11.2013

Honors in Sports

S.No	Students Name	Year	Events Details	Position	Date of the Event
1	M.Dinesh prabhu	III	Inter Zonal Cricket Tournament PSG college of technology, coimbatore	Runners	26/1/2014 to 31/1/2014
2	M.Dinesh Prabhu	III	Anna university 10th Zone Cricket Tournament at JJ college of Engineering and Technology, Tirchy	Runners	11/10/2013 to 16/10/2013
3	S.Sowmiya devi	II	Anna university 10th Zone Athletic, Short put, Sri Krishna college of technology, coimbatore	Winner	30/09/2013 to 01/10/2013
4	S.Mohan Raj	II	Coimbatore district level chess tournament	-	27/09/2013 to 29/09/2013
5	E.Abnaya T.Kavitha	II	Anna university 10th Zone Table Tennis Women at Kongu Nadu college of Engineering	Runners	20/09/2013
6	M.Rajendran	III	Inter Zonal Hockey Tournament (Men) at Hindustan Engineering college	Runners	20/09/2013
7	M.Dinesh Prabhu	III	Anna university 10th Zone Cricket Tournament at MCET, pollachi	Winners	28/08/2013 to 06/09/2013
8	V.Vadivel	III	Anna university 10th Zone Hand ball (Men) at SVS college of Engineering	Third	05/09/2013 to 06/09/2013
	P.Prasanna	IV			
9	S. Sowmiya devi	II	Inter Zonal Cricket Tournament At Andal Azhagar College Of Tech	Runners	26/08/2013 & 27/08/2013
10	S.Yogapriya V.Sasipriya	II	Anna university 10th Zone Women Badminton Tournament At Karpagam College Of Engineering	Runners	26/08/2013 & 27/08/2013
	J.Sasi	III			
11	N.Gokulraj	III	Anna university 10th Zone Women Badminton Tournament At Sri Krishna College Of Tech	Third	22/08/2013 & 23/08/2013

12	S.Sumitha	II	Anna university 10th Zone Women Badminton Tournament At Sri Krishna College Of Tech	Winners	19/08/2013 & 20/08/2013
	K.Gayathri R.Karthiga S.Pavithra	III			
	Mohanpriya	IV			
13	S.Nandhini	IV	Kho kho inter zone	Forth	12/08/2013 to 14/08/2013
	T.Indhumathi	II			
	S.Haritha	I			
14	K.Vignesh	IV	Anna university 10th Zone chess tournament at Jaganathan college of tech	Winners	06/08/2013
	S.Mohanraj	II			
15	P.Srithangam	III	10th KCT Sports fest (throw ball _women)	Winners	2/08/2013 & 3/08/2013
	M.Vaibhav muthu meenakshi	I			
16	S.Savitha	IV	10th KCT Sports fest (foot ball _women)	Winners	
17	N.Gokulraj	III	10th KCT Sports fest (foot ball _men)	Runners	


M HALL

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Web : www.mcet.in