DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Volume - I

DEPARTMENT OF ECE

SPECTRA STUDENTS ASSOCIATION

SPECTRONIX

TECHNICAL- NON TECHNICAL MAGAZINE

POWERFUL PEOPLE COMES FROM POWERFUL PLACE

ACADEMIC YEAR 2021-2022

ECE

SPECTRA

CORRESPONDENT MESSAGE

Dear Students,

Dr. G. U. Pope College of Engineering is an educational institute run by CSI Thoothukudi Nazareth Diocese. It was started as a dream. A dream to provide aspiring technocrats with the right knowledge base and rigorous training in order to make them a force to reckon within the global engineering industry. Yes that dream took the shape of Dr. G. U. Pope College of Engineering. The college is duly Approved by All India Council for Technical Education, New Delhi and affiliated to Anna University, Chennai. Today Dr. G. U. Pope College of Engineering has grown into a premiere institution providing not only quality Engineering education to mould the students into technologically sound, efficient, effective and creative engineers but also mould them as responsible human beings. It has earned a name amidst the student community as a 'Distinguished Centre for Excellence in Engineering Studies' providing a serene environment and congenial atmosphere for learning.

Thiru. R,Rajesh RaviChandar
Correspondent

PRINCIPAL MESSAGE

Dear Students,

Dr. G. U. Pope College of Engineering has been doing a yeoman service
in coordinating the rural students in this area to give technical education on par with centers of excellence. The facilities with which the students are trained make them go to zenith. The committed members of the staff pull the yoke of Dr. G. U. Pope College of Engineering on the road to technical excellence. The right ambience is created in all spheres so that the learning experience is challenging and productive. I welcome you all to join this winning team so as to become a technocrat of all round excellence.

Dr. J. Japhynth, M.E., Ph.D., MISTE
Principal

HEAD OF THE DEPARTMENT

Dear Students,

It is an occasion of great pride and satisfaction for the department of ECE, GUPCE to bring out the first issue of the Technical magazine Spectronix it gives me immense pleasure to note that the response to the magazine has been overwhelming. The wide spectrum of articles gives us a sense of pride that our students and faculties possess creative potential and original thinking in ample measures. Each article is entertaining interesting and absorbing. I applaud the contributors for their stimulated thoughts and varied hues in articles contributed by them.

Mrs. S Selvarathi Ponmalar, M.E.,MISTE.,
HOD / ECE

About our college

Dr.G.U.Pope College of Engineering is the answer to the fervent prayers of the well-wishers of Sawyerpuram, that technical education be available in its vicinity. The college commenced serving the community of Sawyerpuram, during the academic year 2002-2003. It runs under the auspices of the CSI Thoothukudi-Nazareth Diocese- established by sincere and dedicated missionaries, dedicated to provide quality and disciplined education to the remote areas. The college is located in an idyllic setting amidst natural beauty on the Thoothukudi-Sawyerpuram 'Theri Road.

MISSION

- To render quality education to rural students by tapping knowledge and technological resources.
- To produce young engineers and entrepreneurs with strong skills and ethical background.
- To inculcate and develop national spirit, character and respect for Indian culture among students

VISION

To provide quality technical education with strong ethical values to rural people and create socially responsible young Engineers and Entrepreneurs to serve the nation.

Welcome to Electronics & Communication Engineering

- **The Department was established in 2002 with B.E Programme in Electronics and Communication.**
- **All the courses are offered as full-time.**
- **The experienced professors guide the department aiming at educating and training students with sound knowledge and awareness in the fields of electronics, communication and information technology.**
- **The Department has signed MoU with Iconicx Soft solution. Various workshops and training program are frequently conducted in the department. Every year department organizes National Conference. A National level technical symposium 'SPECTRA' is being conducted by ECE Students Association.**

DEPARTMENT MISSION

- **To prepare students, proficient to meet the needs of current and future technological advancement in the field.**
- **To inculcate team work & leadership qualities to make the students industrialisation & employable.**
- **To create students with effective communication skills , the abilities to lead a ethical values in order to fulfil the social needs.**

DEPARTMENT VISION

• **To develop self motivated , creative and knowledgeable Electronic communication professional from every students who will lead the nation towards a better future by strongly developing the academic and research to meet the social commitment.**

PEO1:

To enable graduates to pursue research, or have a successful career in academia or industries associated with Electronics and Communication Engineering, or as entrepreneurs.

PEO2:

To provide students with strong foundational concepts and also advanced techniques and tools in order to enable them to build solutions or systems of varying complexity.

PEO3:

To prepare students to critically analyze existing literature in an area of specialization and ethically develop innovative and research oriented methodologies to solve the problems identified.

NAME OF LABS

- Electronic Devices & Circuits Laboratory
- Linear/Digital Integrated Circuits Laboratory
- Microprocessor and Microcontroller Laboratory
- Digital signal Processing Laboratory
- Optical and Microwave Laboratory
- VLSI Design Laboratory
- Analog/Digital Communication Laboratory
- Embedded Laboratory

OUR FACULTIES...!

Mrs.S.Selvarathi Ponmalar M.E., MISTE
Head & Asst Prof
Area : Communication Systems

Mrs.G.Ponseka M.Tech.,
Asst Prof /ECE
Area : Information systems

Mr.G.Thomas Albert M.Tech.,
Asst Prof / ECE
Area : Applied Elctronics

Mrs.A.Mabel Rajakumari M.E.,
Asst Prof / ECE
Area : Communication Systems

Mrs.S.Jenita Roobavathi M.E.,
Asst Prof / ECE
Area : Applied Electronics

Mr.J Swinglin Jeevadurai M.E.,
Asst Prof / ECE
Area : Embedded Systems

Mrs.E.Alwina Mercy M.E.,
Asst Prof / ECE
Area : Power Electronics

Mrs.R.Priyadharshini M.E.,
Asst Prof / ECE
Area : Communication Systems

Mrs.J. Percy Ponnamal M.E.,
Asst Prof / ECE
Area : Communication Systems

Mrs.J.Jenifa Delphin Dayansi M.E.,
Asst Prof / ECE
Area : Communication Systems

Mr. J. Blessing B.E.,
Lab Assistant

Mr. T.Hamilton B.E.,
Lab Assistant

EDITOR'S DESK

The Creative minds of the Electronics and Communication department of Dr G U Pope College of Engineering have come together to present what they have always wanted to and we congratulate every student who has given their contribution. They can't be appreciated enough and we can't explain how difficult it was to compile all their accomplishments into a single magazine. We take pride in showing you of how our very own Popeianz have imaginations which spread across the horizons. We would like to thank the Management and all the staffs who have supported the 'SPECTRONIX' Volume – I initiative and for having trust in the Editorial board by giving us full freedom to choose the contents and design for out magazine. The magazine should serve as a pillar of motivation for every other student who is yet to emerge as an Achiever and to carry the legacy of spectronix. The students who follow in the next academic years, we advice you to do the same. B.E. productive but at the same time B.E. creative!

EDITOR IN CHIEF

Mrs. S. Selvarathi M.E.,
HOD / ECE

EDITORS

Mr. M.Anish Mathan
IV - ECE
Batch (2018 - 2022)

Ms. K. ABIRAMI
III - ECE
Batch (2019 - 2023)

Mr. D . PONSAMUEL
IV - ECE
Batch (2018 - 2022)

Our Students
Achivements!

STATE LEVEL WINNER

MS.K.ABIRAMI

III - ECE

IN SRI RAMANUJAN STATE LEVEL MATHS COMPETITION WHICH WAS CONDUCTED BY INDIAN SOCIETY FOR TECHNICAL EDUCATION NEW DELHI

BEST STUDENT AWARD

MS.T.SELVALAKSHMI
Reg No : 950416106023

FOR HER OVERALL PERFORMANCE IN ACADEMIC AND EXTRACURRICULAR ACTIVITIES ISSUED BY ISTE TAMILNADU CHAPTER

Our Students Achivements!

Mr. S RAVI KANNAN
IV -ECE
Reg No : 95041810620

"I played for the India & I won in the Indo nepal invitational cricket tournament 2021 - 2022   I also Participated and won In 20+ District level Tournament By Representing Thoothukudi Cricket Teams"

UAV BASED CELLUAR NETWORK FOR RURAL AND RESTRICTED NETWORK AREAS WITH MINIMUM COST

Bringing cellular connectivity in rural zones and restricted network areas with low cost and low noise is the objective of our project. To tackle this aspect, we consider an alternative architecture composed of UAV-based BSs to provide cellular coverage. For this project we using the following blocks, UAVs as a micro BSs and for UAV we are using QAM modulation and demodulation block. adaptive filter block. We then target the minimization of the installation cost in UAV-based cellular architecture, by taking into account the constraints of UAVs coverage, SPs energy consumption, Levels of the batteries and the deployment of the optical ring. The 4G wireless connectivity is largely spread in the world. At the same time, the Internet penetration rates are well above 80% in the developed countries. However, at least two billion people, mostly living in rural and low income areas, are currently experiencing a complete lack of wireless Internet coverage. This is due to the fact that tele-operators are not keen to invest in such zones, due to relative low Return On Investment (ROI) rates. To tackle this aspect,

I consider an alternative architecture composed of UAV-based BSs to provide cellular coverage in rural and the restricted network areas with low cost. UAV- based cellular architecture mainly consist of softwarized radio Base Stations (BSs), whose functionalities are decomposed in elementary blocks, and run on Commodity Hardware (CHW) and Dedicated Hardware (DHW). In this scenario, the low-level BS functionalities are deployed on the DHW carried by the UAV, while the high-level ones are run on the HW (both DHW and CHW) installed at the ground site. The decoupling between high-level and low-level functionalities allows decreasing the amount of HW carried by the UAV, and consequently facilitates the moving of the UAVs over the territory. Without loss of generality, quad- copters UAVs are assumed in this work. In addition, an area is covered by a UAV when the UAV reaches the location selected for that particular area (which can be the central one or based on covering an area). In order to ensure the cellular connectivity, the distance between the UAV covering an area and the site at which is connected (through a radio link) has to be lower than a maximum value.

This is an essential condition to maintain the connectivity between the low-level functionalities flying on the UAV and the high-level ones placed at the ground site. Focusing then on the ground sites, we assume to control the installation of a subset of sites from a set of candidate ones. In this context, optical fiber links need to be deployed to physically connect the sites. We then target the self-sustainability of the system, by assuming the exploitation of SPs and batteries, which are installed in each ground site. In this way, the energy is only derived from RESs, without the need of exploiting the electricity grid. In this context, time is discretized in Time Slots (TSs). In each TS, the battery level of the site is computed, by considering: i) the battery level at previous TS, ii) the energy produced by SPs in the current TS, iii) the energy used to power the ground site (which include, e.g., the CHW and the optical equipment), and iv) the energy used to recharge the UAVs. Finally, in each TS each area is covered by one UAV. On the other hand, a UAV in a specific TS can either: i) cover an area, or ii) recharge itself at a ground site. Given this architecture, we then target the problem of minimizing the costs of the installed sites, the deployed SPs, the deployed batteries, and the installed optical ring. To this aim, we consider a long-term optimization, where the set of TSs is considered jointly together.

To the best of our knowledge, this is the first work targeting such a complex problem. However, the solution of the considered problem is not trivial, due to presence of multiple constraints, which include: i) the covering of the areas, ii) the maximum distance between each UAV and the ground site at which it is connected, iii) the variation over time of the SPs energy production, iv) the battery levels above a minimum value in all TSs, in order to prevent battery failures, v) the maximum number of components (e.g., SPs, batteries, UAVs) that are available, and vi) the correlation between different TSs (e.g., a UAV has to be recharged after. We have targeted the problem of minimizing the total costs of an UAV-based 5G architecture, which is able to provide coverage for a set of rural and restricted network areas. We have considered the sites installation costs, as well as the costs of SPs, batteries, UAVs, and the optical ring among the installed sites. We have then scheduled each UAV flight in order to either cover an area or to recharge the UAV at the ground site. Our results indicate that the noise can be greatly reduced compared to the case in which a fixed 5G deployment is assumed.

Mrs. S. Selvarathi Ponmalar
HOD / ECE

"WOMAN A PERENNIAL SOURCE OF STRENGTH AND LOVE"

- Mrs. G. Ponseka M.E., (AP / ECE)

The role of woman in India today has been formed by traditions. The nature and role of women in the society is presented by great heterogeneity, divergence and multiple paradoxical appearing phenomena as India itself. In order to remedy these conflicts, women have to play an active role in the society.

While travelling through India, we will notice that we cannot elude ourselves from a spiritual omnipresence. The principle of 'being' forms this country far too much and play a crucial role at every level of human existence. In order to understand her role in modern times, one must look to the past. It is important to recall that the femininity is seen as a creative manifestation of the cosmic principle.

The devotion towards the superior and also towards the family and the willingness to sacrifice, forms the existence of women in India at all societal levels in all periods. Unfortunately today woman is discriminated at all levels. Surprisingly, Indian society considers women as an embodiment of love and kindness. She is also considered as Creator and Destroyer (all powerful). The same society which is patriarchal subjects her to oppression and humiliation in political, social and economical aspects of life.

There is a need for women in modern India to be aware of their strength and their potential. They have to oppose any thing that is meant for their suppression. In order to do this they must be educated and made economically independent. They have to assert themselves and must change the social frame work in order to stand up for the goals and values, which are important for them. The turning point in India can only be achieved through active participation of women in national movements in which education must precede. Education and freedom, as well as its acceptance by the male side would arrange a new self-confidence, a newly defined image. She can then no longer let herself be subordinated, but operates on equal height with men in the society. Man and woman are still trying to find their place in a society which balances between spiritual tradition and market based modernity. Woman is and will remain a source of strength and love. She always remains the embodiment of the values of Dharma.

THE STORY OF SEMICONDUCTORS

- Mrs. A . Mabel Rajakumari M.E.,
Asst Prof / ECE

How Useless Turned Useful :

Today we cannot think of the modern World without mobile phones, Television sets, laptops, Video games and many other such products. However, none of these would have been possible today had semiconductors not been discovered. Semiconductor devices are at the heart of the microelectronic revolution in the information age of today. These most useful materials of today were considered almost useless in the past. The resistivity of Semiconductors (Ge, Si) decreases upon heating. Semiconductors also show a change in their resistivity when illuminated with light. In 1906, H.J. Round observed that some Semiconductors emit light when electric current is passed through them. They can also convert alternating current into direct current, a phenomenon called rectification. In 1904 J.C. Bose was the first to use super conductor junctions to detect radio signals. Semiconductors now came to be known of two types-namely p- type semi conductors in which holes are majority carriers and n- type semiconductors in which electrons are majority carriers. Development of n-type and p-type semiconductors led to the p-n junction diode. These diodes replaced the existing vacuum tube diodes due to more advantages in cost, size, reliability and efficiency. In 1948 Shockley, Bardeen and Brattain discovered a transistor. It is an ingenious discovery.

After this many new types were invented, a few of which are field effect transistor (FET), junction field effect transistor (JFET), and metal-oxide semi conductor field effect transistor (MOSFET).

The Chip Revolution :

A revolutionary concept was proposed by Jack Kilby for creating all components of an electronic circuit in a single semiconductor chip called an integrated circuit(IC). Since the invention of the first IC, the size and cost of IC has been steadily decreasing. This progress received in the early 1970s when Hoff and his team developed the first microprocessor, an IC chip capable of performing all functions of the computer's central processing unit (CPU). The chip revolution made the most profound impact on our society. It ushered in the era of the smart technology. Smart technology uses computer systems and microprocessors to enable everyday tasks, e.g., automatic teller machine (ATM), bar code scanners and biometric security machines. A smart card has embedded integrated circuits that can store a vast amount of data and programs that can be used for purposes such as identification and authentication. Biometric security machines scan a part of a person's body and compare the scanned image to identity that person.

QUALITIES OF A GOOD STUDENT

- Mrs. S. Selvarathi Ponmalar M.E.,
HOD / ECE

Historically the term student refers to anyone who learns something. However, the recent definition of a student is that anyone who attends a school, college or university. Based on personal experience and research, I list down the qualities of a good student.

1. Attitude :

Basically, a good student should possess the ability and willingness to learn new subjects even the subjects are not interesting.

2. Academic skills :

Acquiring academic skills is the most important quality of a good student. Ability to read comprehensively, to write effectively, to speak fluently, and to communicate clearly are the key areas in which a good student must be proficient.

3. Ability :

A good student should have the ability to apply the results of his or her learning to achieve the desired goals in a creative way.

4. Perceptiveness :

How well a student can interpret and perceive meanings from a conversation greatly determine the quality of a good student. A good student always perceives right meaning from conversations, but an average student often misunderstands the original thoughts of a speaker or writer and derives a wrong conclusion.

5. Self discipline :

Discipline in managing the time is an important factor that every good student must possess. Often, delaying the tasks, such as writing assignments, reading text books, etc. may negatively impact the ability of a student to deliver the goods.

6. Understanding rather than memorizing concepts:

A lot of surveys suggest that students must understand the concepts rather than just memorize them. The memorized facts and theories will stay in students memory until they leave the school, college or university. Once out of school, the student will totally forget the core concepts that they have learned. A good student always understands instead of memorizing the concepts.

7. Behaviour :

A student should have to know how to behave with his or her mates, teachers, parents and elders.

8. Asking doubts :

A good student doesn't hesitate ask questions in order to clarify his/her doubts.

SAVE WATER AND SAVE LIFE

- Mrs. R. Priyadharshini M.E., (AP / ECE)

Water covers 70% of earth's surface. But in that only 3% of water is clean and suitable for human consumption. Water has a very important role to play in our daily life. According to a survey, the average family of four members, uses 450 litres of water per day, 1,64,000 litres of water per year. If it is continued in future we are going to face water wars. To avoid this we have to save water for the coming generations.

Some Important Tips to Save Water at Home :

✦ Turn off the tap when you brush your teeth which can save 6 litres of water per minute.

✦ Place a cistern displacement device in your toilet cistern to reduce the volume of water used in each flush.

✦ Take a shorter shower. Shower can use any thing between 6 and 45 litres per minute.

✦ Fix a dripping tap. A dripping tap can save 15 litres of water a day or 5,500 litres of water a year.

✦ Install a water butt to your drain pipe and use the water collected to water your plants, wash your windows or cars.

✦ Water your garden with a watering can rather than a hose pipe. A hosepipe uses 1,000 litres of water an hour. Watering the plants in the early morning and late afternoon will reduce evaporation and also save water.

✦ Repair dripping faucets by replacing washers. If your faucet is dripping at the rate of one drop per second, you can expect to waste 2,700 gallons per year which will add to the cost of water and sewer.

✦ Invest in water-efficient goods when you need to replace household products. You can now buy water – efficient shower heads, taps, toilets, washing machines, dish washers and many other water saving products.

✦ Verify that your home is leak-free, because many homes have hidden water leaks. Read your meter before and after a two-hour period when no water is being used. If the meter does not read exactly the same, there is a leak.

✦ When adjusting water temperature, instead of turning water flow up, try turning it down. If the water is too hot or cold, turn the offender down rather that increasing water flow to balance the temperatures.

Please.........save water and save life.
And save water, secure your future.

EMBEDDED SYSTEM IMPACT YOUR EVERYDAY LIFE

- Mr. J. Swinglin Jeevadurai M.E., (AP / ECE)
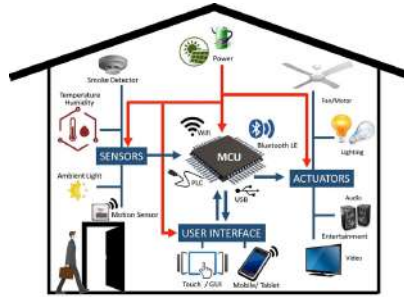
Definition

An embedded system is a combination of hardware and software, which can be embedded in another larger system (which may be or may not be a computer system). Ex:- Television, DVD Player, Camera, Air Conditioner, Fridge, Printer, Fax machine etc.,

ADVANTAGES OF EMBEDDED SYSTEM

- No need for hardware updates
- Concentration on a specific task
- The flexibility of operating system requirements
- An economy of storage and power resources
- Cost-effectiveness.

EMBEDDED SYSTEMS IN HOME

Embedded systems are essential parts of home life in the new world. In the bedroom, you may find a T.V., digital alarm, clock, and cable box, all three of which are devices that leverage embedded systems. The living room will possibly have another T.V., digitally controlled audio systems, a wireless access point, a router for Internet access, and controllers for video gaming consoles. All of these devices are excellent examples of how omnipresent embedded systems have become.

Moving out into other areas of the home, you will find two embedded systems, smoke and carbon monoxide detectors that help alert you in the event of danger inside the home. All these examples are just the tip of the iceberg when it comes to embedded systems within the modern home.

EMBEDDED SYSTEMS ON THE ROAD

Vehicles on the road now are full of embedded systems designed to enhance your driving experience. Convenience features like satellite radios and global positioning systems (GPS) are other excellent examples of embedded systems that can be found in current vehicles.

Moving forward, with self-driving cars becoming more and more popular, embedded systems will only become even more critical to the automotive industry over the next decade.
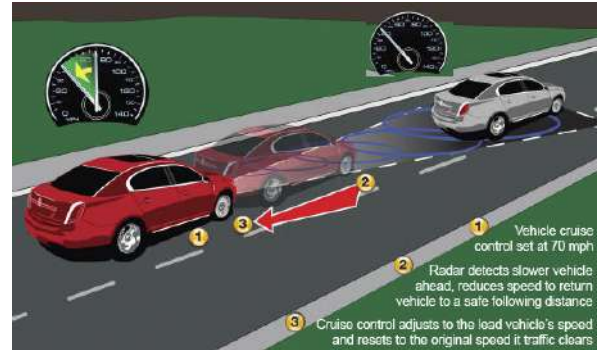
EMBEDDED SYSTEMS IN BUSINESS

Whether you work in a restaurant, office, factory, or other environments, it is likely that your workplace is full of embedded devices. Some of the examples of embedded devices in the workplace are:

- The elevator that gets you to your office
- The point of sale systems at restaurants
- The routers and switches that send data across corporate networks
- The printers and scanners that help you make physical/ electronic copies of the document
- The machine control & monitoring devices in industrial plants that keep assembly lines moving

To gain more understanding of the embedded system in business, you can join embedded system Course in Noida.

Recent Technologies

- Mrs. S. Jenita Roobavathi M.E., (AP / ECE)

HYPERLOOP:

Billed as the fastest way to cross the surface of the earth, hyperloop represents the greatest leap in transport infrastructure for generations. With passengers sitting in pods that travel at airline speed through pressurized tubes using electric propulsion and magnetic levitation, the concept promises to slash journey times between major cities from several hours to a matter of minutes. While it may feel like science fiction, hyperloop is now on the cusp of becoming a reality. Hyperloop was first conceived in 2012 by Tesla and SpaceX founder, Elon Musk.
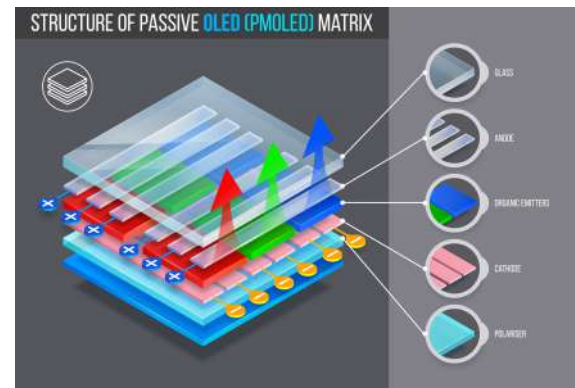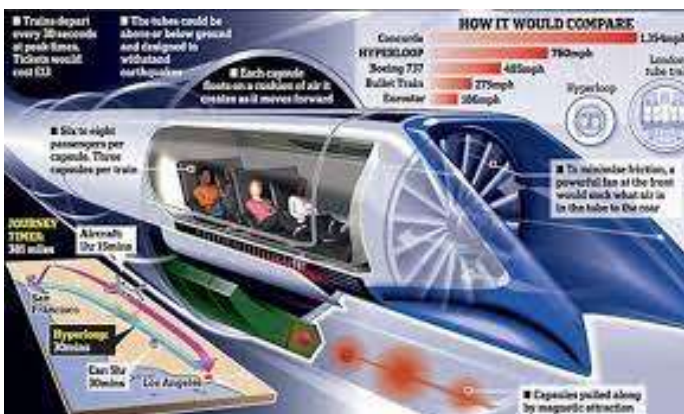
OLED:

Organic Light Emitting Diode is an advanced display technology made from thin films of light emitting organic materials. OLEDS are made by placing a series of organic thin films between two conductors. When electrical current is applied, a bright light is emitted. Currently OLED Displays are made by evaporating gases in a vacuum chamber, but in the future OLED can be made by Ink-Jet printing, a process that is quick and cost effective. OLED Display are simpler than LCDS, as they do not require any backlighting and filtering. OLEDS have many advances over LCDS. It as better contrast, higher brightness, faster refresh rates, lower power consumption and it has simpler design that enables ultra-thin, flexible, foldable and transparent displays. OLEDS are considered by consumers and professional alike to be the best displays ever.

3D PRINITING

- Mrs. J. Percy Ponnamal M.E., (AP / ECE)

3D PRINTING:

3D printing technology is already changing the way we produce objects from tools and toys to clothing and even body parts. 3D printing is part of a process known as additive manufacturing, where an object is created by adding material layer by layer. Additive manufacturing allows designers to create complex parts for machines, airplanes and cars at a fraction of the cost and time of standard means like forging, moulding and sculpting. Now, smaller consumer friendly 3D printers are bringing additive manufacturing to home and businesses.

The first step in 3D printing is create a blueprint of the object you want to print. You can use modelling software like Blender to create your own designs or you can refer some websites for designing. Once you have finished design it's time to send it to the printer. Some printer has removable bioplastic spools in the back of the device almost like a string. When the printer receives the data, it pulls the material through a tube, melts it, and deposits it to the plate, where it instantly cools. The 3D object is created through layering where the printer will add one layer of the object at a time until you have a fully formed structure
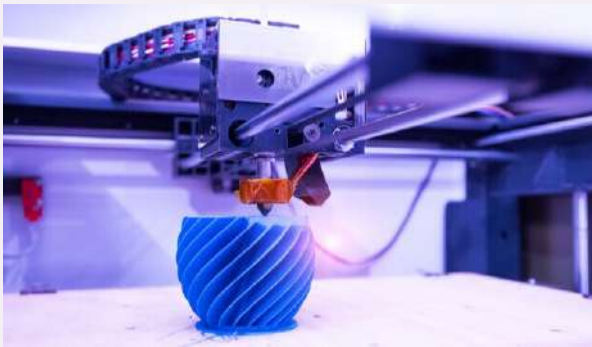
The most common material used in 3D printing is plastic. But the use of some other materials allows for the creation of amazing products beyond simple tools and toys. 3D printing food is becoming very popular and additive manufacturing has allowed for the creation of some intricate treats. In the medical world, doctors are testing bio-materials for regenerative medicine. By using patient's cells, doctors could 3D print small body parts like ears and noses. Some surgeons have even tested 3D printed organs for transplants. Recently, giant 3D printers in China, printed ten houses in just one day at a cost of less than $5000 per house.

SOLAR TREE

- Mrs. E. Alwina Mercy M.E., (AP / ECE)

Now a days with the growing population and energy demand and that energy should not cause pollution and other natural hazards. In this case the solar energy is the best option for us. India is a highly populated country, so we should take the advantage of such an energy which requires a very less space to produce energy efficiently . In this case solar tree could be the best one for us .

What is a Solar Tree?

A solar tree is a decorative means of producing solar energy. It uses multiple number of solar panels which forms the shape of a tree. The panels are arranged in a tree fashion in a tall tower/pole.

TREE stands for
T=TREE GENERATING
R=RENEWABLE
E=ENERGY and
E=ELECTRICITY

This is like a tree in structure and the panels are like leaves of the tree which produces energy. It may be a functional power generator or a solar artwork.

WHY WE CALLED IT AS SOLAR TREE

Tree can produce their own food material by the process called PHOTOSYNTHESIS. Leaves are producing food materials for human beings. Likewise in solar tree solar panels are producing energy for the society.

WHY IT IS BETTER THAN A TRADITIONAL SYSTEM

For the traditional system we require large size of land. Example –To generate 2 MW power from a PV module we requires 10 -12   acres of land for housing of panels only. For the same amount of energy we require only 0.10-0.12 acres of land in case of solar tree

Importance of Solar Trees Usage in India

While speaking at a webinar on 'Energy for Sustainable Growth,' PM Modi emphasized the importance of renewable energy in India and urged the people of the nation to develop their own solar trees, which can help save up to 15% on electricity.

India's energy demands will rise in the upcoming future; thus, a switch is required to transition to renewable energy. Hence, every Indian household should develop solar trees which can save up to 15% on electricity.

The builders and architects of the nation should also look to implement solar trees in their designs and buildings.

Engineering Made Simple!

- Mr. G. Thomas Albert M.Tech., (AP / ECE)

Understand the basics of the components

ARDUINO UNO

Arduino is an opensource hardware and software company, project and user community that designs and manufacture single-board microcontrollers and microcontroller kits for building digital devices and interactive objects that can sense and control objects in the physical and digital world Starting clockwise from the top center: •Analog Reference pin (orange) • Digital Ground (light green) • Digital Pins 2-13 (green) • Digital Pins 0-1/Serial In/Out -TX/ RX (dark green) - These pins cannot be used for digital i/o (digital Read and digital Write) if you are also using serial communication (e.g. Serial begin).
• Reset Button - S1 (dark blue) • In-circuit Serial Programmer (blue green) • Analog In Pins 0-5 (light blue) • Power and Ground Pins (power: orange, grounds: light orange) • External Power Supply In (9-12VDC) - X1 (pink) • Toggles External Power and USB Power (place jumper on two pins closest to desired supply) - • SV1 (purple) • USB (used for uploading sketches to the board and for serial communication between the board and the computer; can be used to power the board) (yellow)
ADVANTAGES: • Inexpensive • Cross-platform
•Simple, clear programming environment
• Open source and extensible software
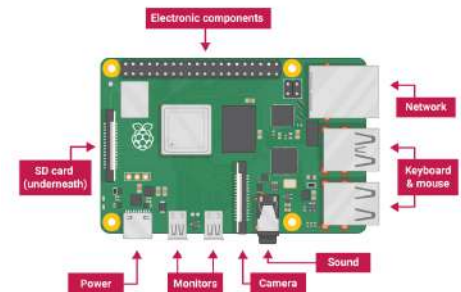
Rasperry Pi

The Raspberry Pi is a series of small single-board computers developed in the United Kingdom bythe Raspberry Pi Foundation to promote teaching of basic computer science in schools and in developing countries. Two 5V pins and two 3V3 pins are present on the board, as well as a number of ground pins (0V), which are unconfigurable. The remaining pins are all general purpose 3V3 pins, meaning outputs are set to 3V3 and inputs are 3V3-tolerant. Outputs: A GPIO pin designated as an output pin can be set to high (3V3) or low (0V). Inputs: A GPIO pin designated as an input pin can be read as high (3V3) or low (0V). This is made easier with the use of internal pull-up or pull-down resistors. Pins GPIO2 and GPIO3 have fixed pull-up resistors, but for other pins this can be configured in software. More: As well as simple input and output devices, the GPIO pins can be used with a variety of alternative functions, some are available on all pins, others on specific pins. PWM (pulse-width modulation) • Software PWM available on all pins

CAREER VOICE

-Mr.D. Jackson M.E.,MISTE., (HOD / CIVIL)
Placement Director

Campus placements or on-campus recruitment gives you the best opportunity to get a good job in a good company or organization. Instead of you going and knocking on the doors of potential employers, here they come to you. To succeed, you just have to be one step ahead of your competitor with the required skills.

PREPARATION
Resume & Certificates

It should be properly kept ready. Resume should give the total projection of a candidate. Carry all your certificates, achievements for the campus interview. Good marks Your mark sheet talks a lot about your interest in and commitment to academic studies. Be smarter than others Learn something other than what you study in your curriculum. That could be a certificate course in a language or soft skills, etc,. Dress Formal attire that's modest and pleasing to the eye.

WRITTEN TEST and G D Written test.

The more you prepare, the better you perform. Always aim to get into the top 10 ranks. Aptitude test It tests your problem solving skills, analytical skills, logical reasoning and communication

Group Discussion (G.D)

GD is nothing but a debate on a topic in presence of judges. A topic is given and a small group of selected candidates express their views on it. Clarity, relevance and confidence are important. Don't deviate from the topic or repeat the points again and again. Group discussion is not a battle ground. Allow others to share their views.

INTERVIEW

It is the most critical and important step in the campus placement process. It is for the first time the company comes face-to-face with you. Communication is the key sharpen your word power. Talking to friends in English, watching English news channels, reading English news papers are some of the common ideas to improve on the use of language. Remember the five 'C' rule. Be Clear, Concise, Courteous, Comprehensive, and have command over language. Body language Nonverbal communication plays a vital role in interviews. Read a good book and practice it. Listen Don't try to answer before the question is asked. Do not interrupt unnecessarily. Never be silent too.

HOW TO GET PLACED IN A COMPANY

Success is No accident

- **Anish Mathan M ,   IV - ECE   (2018 - 2022)**

Hi, Each and every one of you have an unique dream, some want to get placed in a core company, some in an IT industry. Some of you want to pursue higher studies, some want to become an entrepreneur. Some want to do family business. The desire of each person's life may vary. Those who want to start their carrier as an employee in an industry this article will definitely help you to attain your goal. Generally, the companies are categorized in two ways,

 1. **Product or service based Company.**
2. **Core Company.**

To get into Core Company: Getting offer in a core company is simple than getting in an IT industry. Need to have a complete knowledge about our core subjects what we have learnt so far. Simple mantra is **"Stop Studying the subjects and start Learning"**. Current world is a competitive world, we all have to equip ourselves so that we can sustain in that. There is no mercy and no frees, one who can adopt to the new technologies can able to get and survive in this corporate world. So start to equip you all now itself

The rounds in the core company:
• **Aptitude plus technical MCQ's**
• **Face to Face interview (Technical and General HR rounds)**
For first round, go through RS Aggarwal book, India Bix, 2braces, Exam Veda websites and know some basic concepts in all subjects to clear this round. For second round, main thing to clear these rounds is to have more faith and confidence upon yourself. Communicating language is secondary, have to deliver the content which you are coming to say clearly and boldly though you are not sure about that. To get into IT industry: Have to learn many things apart from your curriculum, this shows how much interest you are having in learning new things. As an ECE student if you are well versed in programing equal to CSE student, preference will always been given to us.

Rounds in an IT industry:
1. General and Technical Aptitudes
2. Programming round
3. Group Discussion
4. General and Technical HR

First Round: As I said above go through all the sites which is enough to clear this round. **Second Round:** Have to write a program for the given scenario more effectively. I will tell you all secret or mantra which I always use to solve a particular program. First go through the given scenario and see the sample test cases. If you can able to understand the sample input and output then it is easy to solve the code. See, The Computer is a senseless machine, we need to tell everything clearly so that it can do. Just back track your mind, while you read the input and output samples how your mind have understood that. If you found that way, that is nothing but an algorithm. Once algorithm is framed writing program is so simple. So for all the problems, you will definitely have the solution in your mind, the only thing you need to do is search for it without getting panic. **Third Round:** To clear this round, a simple quality you should have that is having a faith and confidence upon you and you should possess a sound listening skill. You need to believe that you can do!! **Fourth Round:** As I said previously, you have to speak clearly and boldly and instead of speaking unnecessarily have to strict to the point. Mostly all the companies will have the same interview process like I mentioned above.

Don't get worried if you don't know anything till now..."Never it is too late to start a thing" so start working towards your dream by today itself...Because no one knows what tomorrow will bring. Whatever the situation may be never let you to hate yourself. If everyone demotivates you, never let your heart to accept that. Those who all are achieved big, loved themselves more than anyone. If you had a faith upon you, though you don't know how to solve a particular problem in your life your mind and heart will surf it for you.

"World is full of Opportunities"

for those who searched for it. Always keep in this in your mind, "Whenever there is a problem there will be a solution for that particular problem". For every problem the solution will always be simple. The only thing we need to do is surf for it. This is applicable to life as well as for the program...

ALL THE VERY BEST to all and wish you all to have a wonderful life and future...

- M ANISH MATHAN
IV - ECE

Infra Red Signal Using Arduino

- **D. PONSAMUEL ,   IV - ECE   (2018 - 2022)**

Nowadays we are using remote control in each and every home appliances rather than pressing the buttons in the home appliances manually from TV to AC(Air conditioner). The remote in all of these appliances communicates through infra red radiation. Yes Infra Red light plays the major role in remote communication. You are changing channels in TV, decreasing and increasing temperature in Air Conditioners, everything happens through the infra red communication of the remote

How the remote communicates ?

The remote has an IC(integrated circuit) which is programmed to send various hexa decimal values whenever a button in the remote is pressed. When we press a button in the remote, it sends a IR signal with a particular time period. However in this article we are going to decode that IR signals and by using that decoded IR signal values we are going to use it upcoming projects. For this decoding process you will need an IR Receiver sensor and an Arduino. The IR transmitter sensor looks like an led but it emits infra red light which cannot seen by human eye. But in this project we are going to use only the transmitter which has three terminals 5V, GND, Signal. Before uploading the code to the Arduino you have to install the IR remote library

Open the Arduino IDE go to sketch then click Include Library and click Manage Libraries
Before uploading the code to the Arduino you have to install the IR remote library
Open the Arduino IDE go to sketch then click Include Library and click Manage Libraries A new page open up.
In that page type IR remote in the search bar click on the first result and select the latest version and then install it.

A new page open up.
In that page type IR remote in the search bar click on the first result and select the latest version and then install it.

PROGRAM CODE

```
#include <IRremote.h>
int RECV_PIN = 11;
IRrecv irrecv(RECV_PIN);
decode_results results;
void setup()
{
  Serial.begin(9600);
  Serial.println("Enabling IRin");
  irrecv.enableIRIn(); // Start the receiver
  Serial.println("Enabled IRin");
}
void loop() {
  if (irrecv.decode(&results)) {
    Serial.println(results.value, HEX);
    irrecv.resume(); // Receive the next value
  }
  delay(100);
}
```
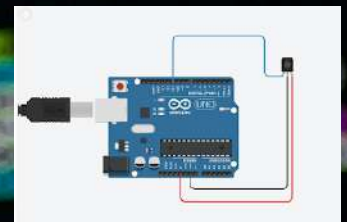
After uploading the code to the Arduino. Open the serial monitor and click any button in your tv remote or any other remote. Make sure that the your placing your remote straight forward to the IR receiver.
After clicking the buttons in the remote, the serial monitor will show you the Hexa-decimal code for every single button.
Each and Every company have their own IR signal standard some have 6 digit and some have 8 digit and so on.
With the use of the decoded IR values we can easily make our own DIY WI-FI remote, which we can customize on our own needs.
With Esp32 setup I Customized my room gadgets with IOT

NANO TECHNOLOGY IS APPLIED FOR TREATMENT OF CANCER

Nanotechnology provide innovative tools that shed greater light on life cycle of normal cells and the point at which molecular processes and changes within cells become correlated with development of cancer. It should be possible to obtain large amount of information from a small source. They aid in analysis of parameters such as cellular mechanics, morphology and cytoskeleton which has been hard to achieve using conventional technology. Nano devices can detect cancer cells, identify cancer signatures and provide targeted delivery of anti cancer therapeutics and contrast agents to tumour cells.

The nano devices can be programmed to destroy affected cells and kills only them.
Using these nano technology, people recover quickly.
The treatment using nano technology will make the affected man perfectly

- Nanodevices can provide rapid and sensitive detection of cancer-related molecules by enabling scientists to detect molecular changes even when they occur only in a small percentage of cells.
- nano particles are targeted to cancer cells for use in the molecular imaging of a malignant lesion.
- Large numbers of nano particles are safely injected into the body and preferentially bind to the cancer cell, defining the anatomical contour of the lesion and making it visible.

The nano device identifies the cancer cells using a gene reader.
A gene reader is a sensor which contains ten to fifty DNA probes or samples of cancer cells that are complementary. The DNA detection system generates an electronic signal whenever a DNA match occurs or when a virus causing cancer is present Whenever we get a signal indicating the presence of cancer cells, we go for further process Once the device has been originally located, the next step is the destruction of the cancer cells.
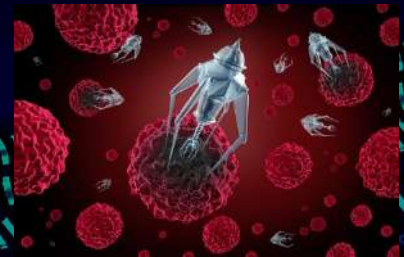
- We can remotely control the behavior of DNA using RF energy.
- An electronic interface to the biomolecule (DNA) can be created.RF magnetic field should be inductively coupled to nanocrystal antenna linked covalently to a DNA molecule.
- The inductive coupling results to the increase in the local temperature of the bound DNA, allowing the change of state to take place, while leaving molecules surrounding the DNA relatively unaffected.
- The switching is fully reversible, as dissolved moleculesdissipate the heat in less time duration.
- Thus RF signal generated outside the body can destroy the affected DNA.

M. ANISH MATHAN
IV - ECE
Reg No : 950418106003

Clips of Spectra 2.2 Intra Department fest

STUDENTS OF ECE

K. ABIRAMI
(Batch 2019-2023)

M.LEELARANI
Batch : (2019-2023)

S. GRACELIN THANGAM
Batch : (2019-2023)

1.வாழ்வில் அனுபவம் ஒருவனை எப்படி வேணாலும் மாற்றலாம் அன்பு மட்டுமே ஒருவனை மனிதனாக முற்றுகிறது!

2.　வாழ்க்கை என்பது ஒரு ரயில் பயணம் மாதிரி.. நிறைய நிறுத்தங்கள்.. நிறைய வழித்தட மாற்றங்கள் விதவிதமான மனிதர்களும் பயணங்கள்..... சில நேரம் விபத்துகளும் கூட அனைத்தையும் ரசித்துக் கொண்டே பயணிக்க கற்றுக் கொள்ளும்! வாழ்விலும் கூட!

3.　ஆயிரம் பேரிடம் யோசனைக் கேள்..... ஆனால் ! முடிவை நீ மட்டும் எடு!

4.."எவன் மிதித்தாலும் முன்னேறுவார்

என்னும் மிதிவண்டி போல் வாழுங்கள்"--- இன்று

M. SAM JENITON

Batch : (2018-2022)

ஆண் என்பவன்

அழத் தெரிந்தவன் அல்ல கண்ணீரை
மறைத்து வைக்கத் தெரிந்தவன்
அன்பில்லாதவன் அல்ல
அன்பை மனதில் வைத்து
சொல்லில் வைக்கத் தெரியாதவன்
பணம் தேடுபவன் அல்ல
தன் குடும்பத்தின் தேவைக்காக
தண்ணீலை மறந்து ஓடுபவன்
சிரிக்கத் தெரியாதவன் அல்ல
சிரிக்க மறந்து
சிந்தனையில் ஆழ்ந்திருப்பவன்
கரடுமுரடானவன் அல்ல
நடிக்கத் தெரியாமல்
கோபத்தைக் கொட்டிவிட்டு
வருந்துபவன்.

1.If they respect you
Respect them.
If they disrespect you,
Still Respect them.
Do not allow the actions of others
to decrease your good manners,
because you represent
Yourself, not others.

M. SAM JENITON
Batch : (2018-2022)

2.   You glow
Differently when you
have good people with
Google intentions in
Your glow.

3.Respect the person who
Expect a smile from you.
And surprise the person who
never expected anything
From you.

4.   No matter what
People think of you!
always keep SINGING
your own song   .

5. We always work for a
better tomorrow but when
Tomorrow comes.
Instead of enjoying, We
again think of a better
Tomorrow! Let's have a
better today..

6 "SMILE like you've never cried,
FIGHT like you've never lost,
LOVE like you've never been hurt,and
LIVE like there's no TOMORROW......

7.   The Secret of your
Future is Hidden in your
Daily Routines...

Art by,
K. Sudar Vizhi

Craft by,
K. Sudarvizhi

K. SUDARVIZHI

Batch : (2018-2022)

J.GRACELIN
(Batch 2018-2022)

Slogans :
1. Proper education gives a feeling of similarity and belongings with at her people .
2. The future of the world is in my classroom today.
3. The capacity to learn is a gift, the ability to learn is a skill, the willingness to learn is a choice.
4. Your future is created by what you do today not tomorrow.

5. The two most important days in your life are the day you are born, and the day you find out why.
6.when life puts you in tough situation font say "why me" say "try me".
7.engineering is like a puzzle think and enjoy.
8.failure is central to engineering, every calculation that an engineer makes is a failure calculation successful engineering is all about understanding how thingsbreak or fail.

1.வாய்ப்பு என்பது வடை மாதிரி நாம தான் தேடி போய் தூக்கனும் பீட்சா மாதிரி வீடு தேடி வரும்னு காத்திருக கூடாது.

2.ஜெயித்து விட்டால் ஜெயித்து விட்டாய் திளைத்துக் கொள்ளாதே தோற்று விட்டால் தோற்று விட்டாய் ஒப்புக் கொள்ளாதே முந்தையது மயக்கநிலை பிநதையது தூக்கநிலை.

3.முடியும் வரை முயற்சி செய் உன்னால் முடியும் வரை அல்ல நீ நினைத்த செயல் முடியும் வரை.

4.எதையும் நம்பாமல் ரசித்தலோடு நகர கற்றுக்கொண்டால் வழியெங்கும் வாசம் மட்டும் நிறைந்திருக்கும்

P.NANDINI

Batch : (2018-2022)
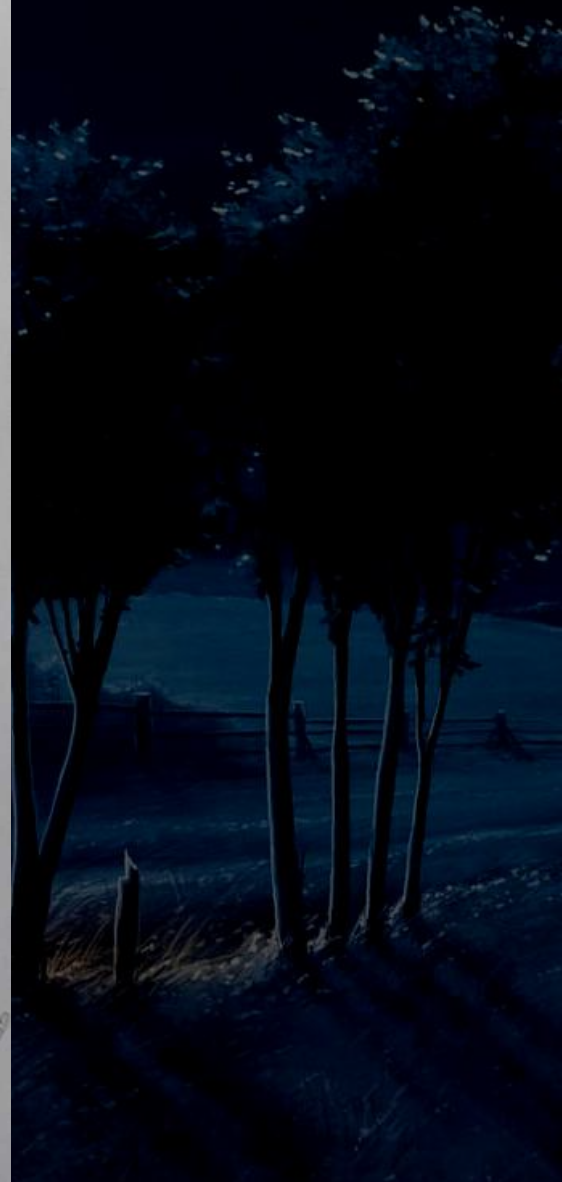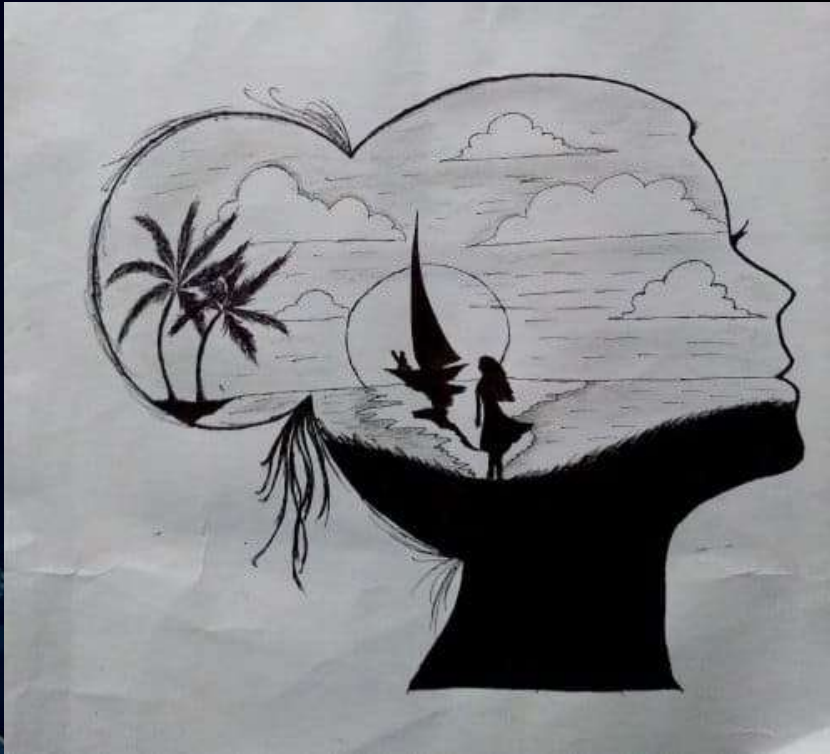
I. SHEEBHA PRISKILLAL
Batch : (2019-2023)

R. SAKTHI PRIYA
Batch : (2019-2023)

The best pair in the world is
SMILE and CRY.
They won't meet each other at A
Time.if they meet, that is the
Best moment in your life...

P.TAMIL SELVI
Batch : (2019-2023)

Every pain
Gives a lesson
And
Every lesson
Changes a person...

கடவுள் என்பது கற்பனை
காதல் என்பது வேதனை
கண்ணீர் என்பது சோதனை
காலம் என்பது ரோதனை
அதையும் மீறி வாழ்வது தான் சாதனை...!!!

விடுகதைகள்

1.எத்தனை முறை திறந்து மூடினாலும் ஓசை வராத கதவு- அது என்ன?
2.காலையில் வெளிப்படுவான்,இரவுக்குள் கட்டுப்படுவான்-அவன் யார்?
3.பையைத் திறந்தால் பவள முத்துக்கள் -அது என்ன?
4.உச்சியிலே ஒரு இனிப்புக் கோட்டை -அது என்ன?
5.வாயில்லாத சின்னவளுக்கு பயிற்சி கொடுத்தால் பேசவும் செய்வான் - அது என்ன?

விடைகள்:
1:கண் இமை
2:சூரியன்
3:மாதுளை
4:தேன்கூடு
5:கிளி

"In a gentle way, you can shake the world."

L.SINDHU
Batch : (2018-2022)

நட்பு

எப்போதும் சிரிக்கும்
என் தோழன்
முதல் முறையாக என்முன்
அழுகிறான்....!
எழுந்து கண்ணீரை துடைக்க
நினைக்கிறேன் நான்....
இறந்து கிடைக்கிறேன்
என்பதையும் மறந்து....!

சிம்மாசனம்

எந்த ஒரு மனிதனும் தேடித் தேடி
அமைந்தாலும் கிடைக்காத
ஒரே சிம்மாசனம் தாயின் கருவறைதான்..

S.NITHISHA
Batch : (2020-2024)

Education is a best way to improve our knowledge

So learn more to improve our knowledge
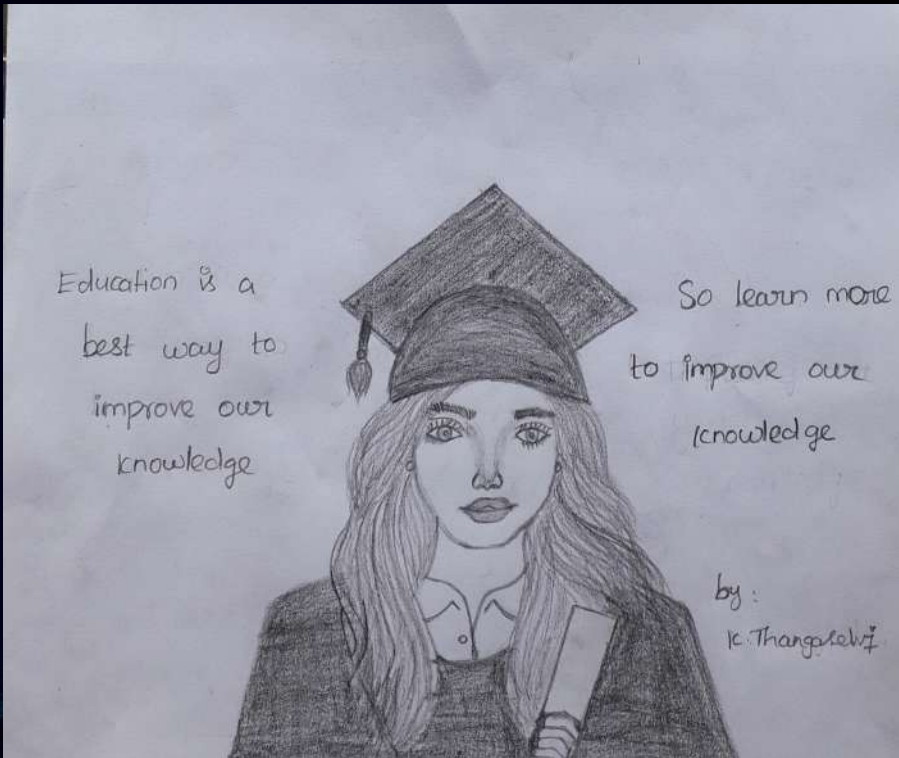
by: k. Thangaselvi

K.THANGASELVI
Batch : (2018-2022)

G.JAYAMARI
Batch : (2018-2022)
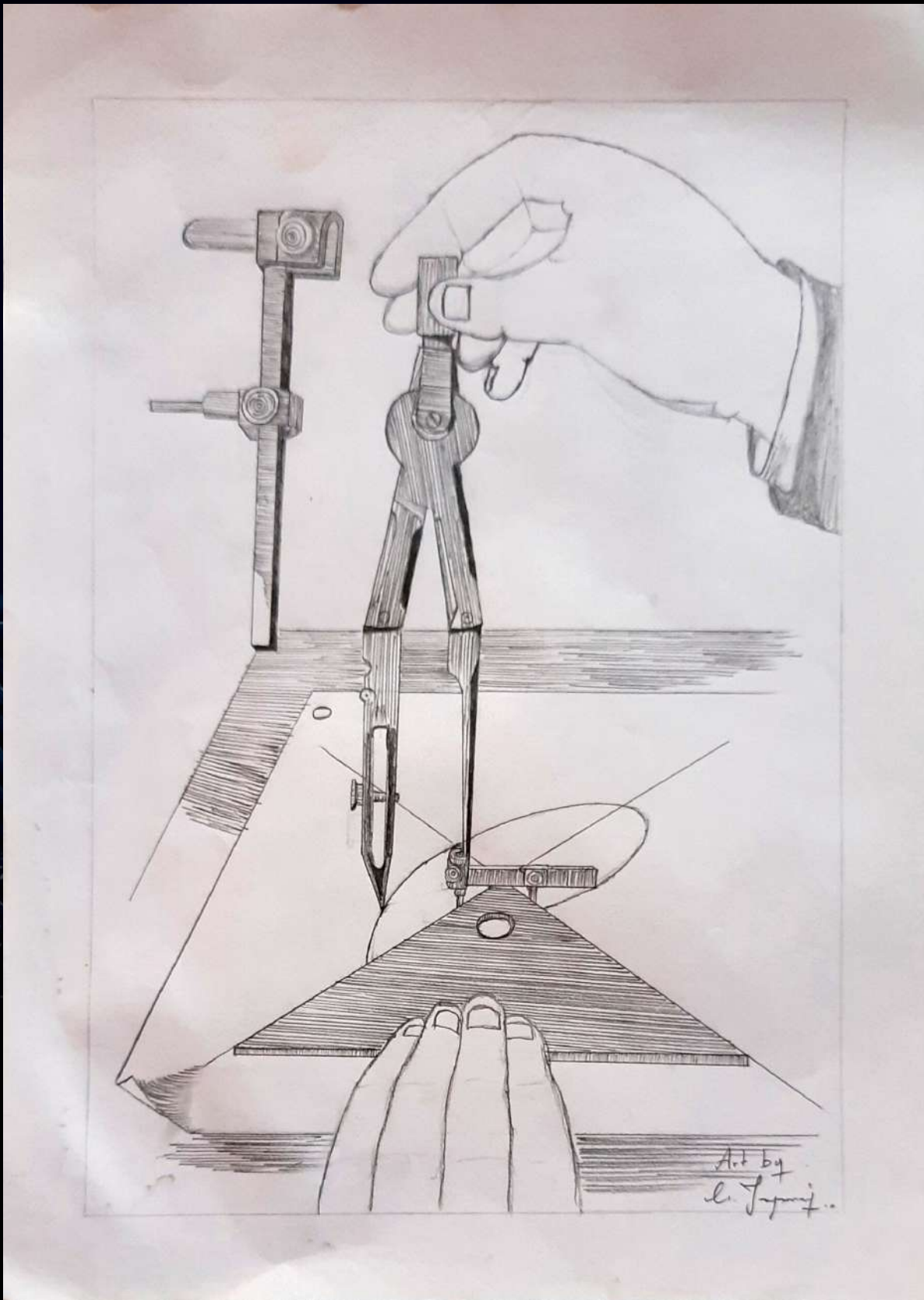
Motivations......!

1."Failure is the opportunity to begin again more intelligently".

2. "The struggle you're in today is developing the strength you need for tomorrow."

3. "Don't let what you cannot do interfere with what you can do".

4. "Imagine with all your mind believe with all your heart achieve with all your might".

5. "If you feel like giving up, just look back on How far you are already".

M. KOWSALYA
Batch : (2018-2022)

Keep smiling, because life is a beautiful thing and there's so much to smile about

In three words I can sum up everything I've learned about life: IT GOES ON.

G.SUBAITHA
Batch : (2019-2023)
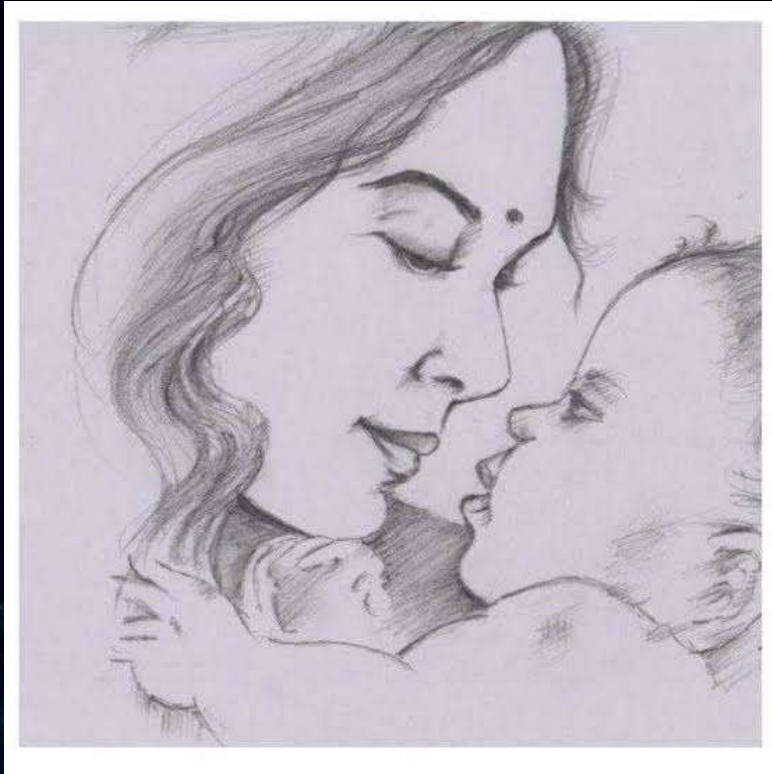
M. SNEKA
Batch : (2019-2023)

If you always try your best
Then you'll never have to wonder
About what you could have done
If you'd summoned all your thunder

And if your best
Was not as good
As you hoped it would be,
You still could say,
"I gave today
All that I had in me".

G. GAYATHRI
Batch : (2019-2023)

I.GAYATHRI
Batch : (2018-2022)

V. KANISHA
Batch : (2018-2022)

Beautiful relations
Are like a Ring
When you wear it
It will hold
Your finger sightly
AND
Whe you remove it

It will surely
Make you feel
It's absence
With a Mark

G.VINOTH PRAKASH
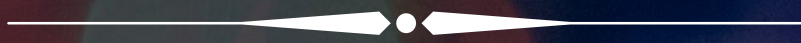
Batch : (2018-2022)

**B.SARAVANA
MANIKANDAN**

Batch : (2018-2022)

The movies listed below have no explicit content or usage of strong language

Movies an Engineer should watch

INTERSTELLAR

2 out of the 10 films listed here have been directed by Christopher Nolan. It takes more than a director to a make a movie like this. With our time on Earth coming to an end, a team of explorers undertakes the most important mission in human history; traveling beyond this galaxy to discover whether mankind has a future among the stars. There is no better sci-fi movie than this nor will ever be

. I ROBOT

In the future presented in the film, humans have become exceedingly dependent on ro bots in their everyday lives. Robots have be come more and more advanced, but each one is preprogrammed to always obey hu mans and to, under no circumstances, ever harm a human. So, when a scientist turns up dead and a humanoid robot is the main suspect. The movie does an excellent job in portraying how Artificial Intelligence is go ing to make a huge impact over the societ

INCEPTION

A masterpiece, The Movie took 4 years of shooting and was worth every bit of it. Inception is a feast for the mind and the senses, the kind of movie experi ence we dream of. No matter how you look at it - as a new take on the heist film, as a narrative mind game, or as a metaphor for filmmaking itself - In ception will thrill you into thinking about weird new ideas.

SOURCE CODE

This is a film that feels 'smart' without desperately trying to be so. The characters are few and the settings limited, such that complex ideas can peacefully exist inside the film, without tying the narrative in knots. It won't seem like a sci-fi, as the movie proceeds towards the climax... BOOM!! The best sci-fi ever watch

ARRIVAL

When mysterious spacecraft touch down across the globe, an elite team--lead by expert linguist Louise Banks (Amy Adams) are brought together to investigate. As mankind teeters on the verge of global war, Banks and the team race against time for answers and to find them, she will take a chance that could threaten her life, and quite possibly humanity. More Heart melting than Science fiction.

PREDESTINATION

Predestination chronicles the life of a Temporal Agent (Ethan Hawke) sent on an intricate series of time-travel journeys designed to prevent future killers from committing their crimes. I DARE YOU TO UN DERSTAND THE MOVIE ON THE FIRST WATCH.

M. ARUNACHALAM
Batch : (2018-2022)

J.LEELASRI
Batch : (2018-2022)

J.PRIYADHARSHINI
Batch : (2018-2022)

"If you have a brother or sister, tell them you love them every day – that's the most beautiful thing. I told my sister how much I loved her every day. That's the only reason I'm OK right now."

Voice of Alumni

DEPARTMENT OF ECE

MR. BENI S GILBERT
BATCH 2003 - 2007
Asst. Vice president, Banking IT , JP Morgan singapore

It is an immense pleasure for this chance to provide my feedback about our SPECTRA and ECE department as an alumna. It was a wonderful time and had a great experience in our college. It was the motivation, which made me participating in lot of paper presentation and cultural events. The one and only reason for all of these is, we have the most dedicated and highly proficient lecturers who treat students as friends and motivate everyone towards our objectives and guide us to improve our path to success along with our moral values of life.

It is the real freedom, we had the chance to organize, decide and participate in all of the spectra events. We worked together to build SPECTRA and conducted many inter-college events to improve the culture of sharing knowledge and thoughts among students. Especially our Head of ECE department and lecturers motivated to perform small and mid-size innovative projects, which helped us to strengthen our views and ideas of project preparation and presentation to a big group of people. These values learnt during college days are helping me till now in my career and those are the immortal values I have ever earned in my life.

Last but not least, it is a great motta "Be first or be with the First" which boosted me to fashioned my life towards hunting knowledge and fullfilling my endeavour to the path of success. Thanks for all the initiatives and guidance which you sow in my college days to reap the outcome forever.

Voice of Alumni

DEPARTMENT OF ECE

MR. A. MANIKANDAN
BATCH 2006- 2010
Software lead, Robert Bosch.

I'm writing to thank you for the generous contribution you have made in my life. I can't imagine my life without our college. You all made my dream came true even in my family's critical financial situation. Not only my life, it also completely turned up most of ours life. I should not forget to mention the names of Janat madam, Selvarathi Madam, Ponsheka madam, Juliet Madam who really cared about my life and was always available to approach. I also want to mention the day where I saw some of our friends photos placed in notice board for being top in the previous sem. I would say it really motivated me to study harder and harder. I guess, It was during my start of second year SPECTRA Symposium. These kind of events really gave us opportunity to overcome stage fear as well. My life is full of college memories which I always want to remember. Once again I would like to thank God, college environment, Professors, Lab assistants and each and everyone who directly or indirectly contributed.

S.SEKINA MERLIN
BATCH 2007 - 2011
Assistant Vice President in Citicorp Services India Pvt Lmtd

Words are powerless to express my gratitude . Dr.G.U.Pope College of Engineering not only moulded me in academic, but also provided spiritual insight.
My college played a vital role for what I am today. I would like to take this opportunity to appreciate the passionate faculties for facilitating such a positive learning environment.

"It is never too late to be what you might have been."

Voice of Alumni
DEPARTMENT OF ECE

T.SELVALAKSHMI
BATCH 2016 - 2020
Dot Net Developer - Sathya Technosoft India Private Limited.

I am glad to provide my feedback about the college and Department, my overall experience to date has been amazing, and the college is having an amazing infrastructure. Our college has provided me with a number of opportunities to grow and explore my skills. The emphasis on sports along with education always helped me a lot. I have always found a positive and healthy environment and professors are highly supportive , knowledgeable, kind, cooperative and open minded. Most of my doubts were cleared after the classes get over. I am highly thankful to our college management for providing me with an opportunity to be a part of this college. It has added a number of values to my life.

T.KAVYA PAVITHRA
BATCH 2017 - 2021
Dot Net Developer - Sathya Technosoft India Private Limited.

I am Kavya Pavithra, a 2021 passed out student of B.E in Electronics and Communication Engineering at Dr.G.U.Pope College of Engineering, Tuticorin. I am glad to provide you with my feedback about the college. All the professors are highly qualified, knowledgeable and friendly. Four years are spent here were full of learning opportunities with right blend of fun & academics. The Department events, Functions and extracurricular activities organized by ECE department & college are awesome. I feel immense respect and gratitude for all the faculty members and ECE department. A heartly thanks to Principal, HOD and all my professors for giving this wonderful opportunity.

Voice of alumni

R. MOSES DANIEL
BATCH 2016 - 2020

My College days are unforgettable and in fact those days are the most happiest & fruitful days in my life I proudly feel that I cherished every moments of my college. The great college life I experienced here was profoundly aided by the excellent and friendly staff. It feels great to be taught by amazing teachers who are the best. I felt blessed being able to study in this reputed institution. I felt the spiritual presence of God throughout the campus. The college has moulded my personality. I have gained many wonderful friends and I will cherish the memories of my college life forever. "Education is not just about going to school and getting a degree, it's about widening your knowledge and absorbing the truth about life" I get to do that with my magnificent Institution. I am proud and elated to say that I am a student of Dr. G. U. POPE COLLEGE OF ENGINEERING.

MRS. SHEEBHA
BATCH 2014- 2018

Hello everyone! this is sheebha. I am graduated in this college on 2018 batch. This is one of the best college in this city. Here I had a very well coaching by qualified lectures and professors. They all work hard in teaching. Our college's principal is an outstanding educator and she is very particular about discipline. In my college life, along with studying, I am spiritually blessed by the college chapel. I have learned and experienced so many things in this college. Also our college providing placement for good jobs in the final year. I am so blessed that I completed my graduation here.

Voice of Alumni
DEPARTMENT OF ECE

BHUWANESHWARAN
BATCH 2013 - 2017
entrepreneur

"It has been a great experience studying in an our college where support and education are of the highest calibre. There is a significant level of support from all the staffs especially selvarathi mam and internal assignments encourage students to engage in wider practicality, which is relevant to university-level studies."

SRINISHAA
BATCH 2009 - 2013
Manager, IOB

I'm Srinishaa, I studied in our college during the year 2008-12. I've joined our college through counselling and have also got scholarship to complete the course. I've learned a lot from this college. Now I'm a Manager in Indian Overseas Bank.

Eventhough I work in a field which is different from my academics, I'm here now because of the attitude I gained from our college. Engineering gives us attitude. A positive attitude will tale us high. Here I wish to thank all staff who were really very supportive to me to gain this attitude. I wish all of you to shine in your life and be a light to others.

Association Activities

A series of technical events conducted
for the all years along with lectures
for rendering more knowledge via
Google meet, hackerrank, Google forms
during Jan - May 2022

Association Activities

Association Activities

IV MEMORIES

ECE 2018 -2022

நான்கு வருட காகித காலண்டர் நாட்கள்
குப்பை தொட்டி நோக்கி பயணம் முடிக்க
குட்-பை சொல்ல கட்டாயம் ஏற்பட
விழியோர கண்ணீர் சிந்தி விடலைப் பெற்றோம் !

பிறவி பயன் அடைந்து விட
கல்லூரி வாழ்க்கை பெற்றேனோ ?
இமை மூடாமல் கண்ணீர் சிந்துகிறேன்
கல்லூரி வாயிலை கடந்து செல்கையில் !

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Thanks & Regards

SPECTRA STUDENTS ASSOCIATION
DEPARTMENT OF ECE
DR G U POPE COLLGE OF ENGINEERING