"With God All Things Are Possible" - Mathew 19:26

CSI Thoothukudi Nazareth Diocese



DR. GUPOPE **COLLEGE OF ENGINEERING**

An ISO 9001:2015 certified institution, Approved by AICTE New Delhi, Affiliated to Anna University, Chennai



THE SUN NEVER SETS ON THE ECE EMPIRE BUT ITS RISES EVERY MORNING



Thiru. R. Rajesh RaviChandar Correspondent

Dear students,

DR.G.U. POPE COLLEGE OF ENGINEERING is an educational Institute run by CSI Thoothukudi Nazareth Diocese. This is a college which produces students who sculpture the society by chiseling the young minds. At this institute, we devote ourselves to empower our budding engineers to achieve quality education imbibed with professional skills and ethical values and to blossom them into capable individuals having high technical competence coupled with healthy mind and strong physique. Our task regarding creativity is to help student climb their own mountains, as high as possible. I wish that this magazine may bring essential change in encouraging students to be highly creative and develop in them a scientific spirit.

WITH BEST WISHES....!



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

Dear students,

DR.G. U. POPE COLLEGE OF ENGINEERING is dedicated to the cause of top quality technical education with the aim of Service to the Society through Quality Technical Education. At this institute, we devote ourselves to empower our budding engineers to achieve quality education imbibed with professional skills and ethical values. The beautiful Magazine – SPECTRONIX - II is an innovative creation of the ECE students My best wishes to all the Editorials. I'm extremely happy and delighted that the students have come up with comprehensive magazine contents which highlights the abilities and potentials of the students. I wish them all the best in their Endeavours.



MRS. S. SELVARATHI M.E., MISTE., HOD / ECE

On the occasion of our ECE Department, completing its 20th year of inception. I deem it my proud privilege to congratulate and acknowledge the contribution made by all the stake holders towards and the development of arowth department. I am proud to say that DR. G. U. POPE COLLEGE OF ENGG continues to be a top-tier Institution with a great vision and mission. Empowerment of ECE students is focused and emphasized not only because of acquisition of knowledge and skills but also on building character relied and improving employability of young budding engineers. I'm glad that the Department of ECE, GUPCE have come out with the second issue of the technical magazine SPECTRONIX, VOLUME II. It gives me immense response to the magazine has been overwhelming.

I Congratulate the Magazine Editorial Comittee for the crisp encapsulation of its yearly activities. May God bless and guide you in your endeavour to raise the department to greater heights.

MY BEST WISHES FOR THE DEPT MAGAZINE...!

The best way to predict the future is to create it.

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 discipline education to the remote areas. The college is located in an idyllic setting amidst natural beauty on the Thoothukudi-Sawyerpuram, Theri Road.



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

- 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.





It's a momentous occasion for the Department of Electronics and Communication Engineering (ECE) at Dr G U Pope College of Engineering as we celebrate our 20th anniversary. Established in 2002, the ECE department has come a long way since its inception and has emerged as one of the premier department in the college.

AS WE CELEBRATE THIS MILESTONE, WE LOOK BACK WITH PRIDE THE ACHIEVEMENTS OF OUR STUDENTS, FACULTY, AND STAFF OVER THE PAST 20 YEARS, AND LOOK FORWARD WITH OPTIMISM TO A BRIGHT AND PROMISING FUTURE. THE DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING AT DR G U POPE COLLEGE OF ENGINEERING IS COMMITTED TO UPHOLDING ITS TRADITION OF EXCELLENCE AND INNOVATION AND TO CONTINUE PRODUCING LEADERS AND INNOVATORS WHO WILL MAKE A POSITIVE IMPACT ON SOCIETY.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

- The Department was established in 2002
- The course is offered as full time.
- The Department is technically strong with well experienced labs and qualified staff members.
- Seminars, Workshops and Technical Symposia are conducted in the department to keep faculty and students updated with latest developments in various technologies.

PROGRAMME EDUCATIONAL OBJECTIVES

PEO 1: Preparation: Acquire educational foundation that prepares them for professional careers / higher studies in the field of Electronics and Communication Engineering.

PEO 2:Core Competence: Obtain in-depth knowledge of the core discipline of Electronics and Communication Engineering in designing new products and finding technically sound, cost effective and socially acceptable solutions to engineering problems.

PEO 3: Multidisciplinary: Utilize their knowledge, skills and resources to design, invent and develop novel technology and find creative and innovative solutions to engineering problems in a multidisciplinary work environment.

PEO 4: Professional Environment: Demonstrate their technical, communication and leadership skills in professional environment or as entrepreneurs with social responsibility and ethical and human values in society.

PEO 5: Environment: Analyze the latest issues and technology growth in the field of Electronics and Communication Engineering and update their knowledge and skills accordingly through continuous learning

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



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.

- i) To preparestudents, proficient to meet the needs of current and future technological advancement in the field.
- ii)To inculcate team work & leadership qualities to make the students industrialisation & employable.
- iii)To create students with effectivecommunication skills, the abilities to lead a ethical values in order to fulfil the social needs.





It gives us great pleasure to inform you that the ECE department's magazine, Spectronix Volume I, was released on June 10, 2022. This magazine is a culmination of the hard work and dedication of our students, faculty, and staff who have contributed their time and effort to create an engaging and informative publication.

Spectronix Volume I is a reflection of our department's commitment to academic excellence and innovation. The magazine features articles on various topics related to electronics and communication engineering, including the latest advancements in technology, research, and industry trends. It also includes inspiring stories of our alumni, faculty, and students who have excelled in their respective fields.

We are proud to present this magazine as a platform for our students to showcase their talent and creativity. We hope that it will serve as a source of inspiration and motivation for our readers, and encourage them to pursue their passions and strive for excellence.

We extend our sincere gratitude to everyone who have contributed to this magazine, and look forward to continuing this tradition of excellence in the years to come.

EDITOR IN CHIEF



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

Ms.I.Sheebha IV ECE Batch (2019-2023)





Ms.K.Abirami IV ECE Batch (2019-2023)

EDITORIAL BOARD

It is an occasion of immense pleasure for the Department of Electronic and **Communication Engineering to publish** the second volume of magazine "SPECTRONIX" for the year 2023. The Editorial board of department of ECE want to thank all the faculty members and students who have made this success by providing articles for the second volume. This magazine focuses on the recent trends evolved in the field of electronic engineering & provides advanced knowledge and awareness among the students. The Editorial board also want to thank the Management and all the staff who have supported the 'SPECTRONIX' initiative and for having trust in the Editorial board by giving us full freedom to choose the content and to design our magazine. The magazine should serve as a pillar of motivation for every student who are yet to emerge as an Achiever. The juniors who follow in the next academic years are adviced to do the same.

"CREATIVITY IS A COIMBINATION OF DISCIPLINE AND A CHILDLIKE SPIRIT"



It gives us immense pleasure to share with you that our ECE department students have once again made us proud by winning the OVERALL CHAMPIONSHIP in various inter-college competitions. We would also like to thank our faculty and staff who have worked tirelessly to support and guide our students in their journey towards success. We look forward to more such achievements and continuing to uphold the tradition of excellence in our department.

OUR SUPPORTING PILLAR'S



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



Mrs.G.Ponseka M.Tech.,

Asst Prof

Area: Infromation Systems



Mr.G.Thomas Albert M.Tech.,

Asst Prof

Area: Appiled Electronics



Mrs.A.Mabel Rajakumari M.E.,

Asst Prof

Area: Communication Systems



Mrs.S.Jenita Roobavathi M.E.,

Asst Prof

Area: Applied Electronics



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



Mrs.E.Alwina Merct M.E., Asst Prof Area: Power Electronics



Mrs.R.Priya Dharshini M.E.,

Asst Prof

Area: Communication Systems



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



Mrs.Ananthi M.E.,

Asst Prof

Area: Communication Systems



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

BEST STUDENT AWARD!

YEAR OF 2022



MR.M.ANISH MATHAN

ANISH MATHAN has been an exceptional student, consistently achieving outstanding academic performance throughout his academic career. He has also actively participated in various technical and cultural events, demonstrating his leadership skills and commitment to the department's development.

Mr. Anish Mathan has been an inspiration to his peers and has set an example for others to follow. His dedication and hard work have earned him this recognition, and we are proud to have him as a part of our ECE department.

We congratulate on his achievement and wish him all the best for his future endeavors. We are confident that he will continue to make us proud with his accomplishments.

OVERALL COMPHIONSHIP

TRUE CHAMPIONS, LIKE THE SUN, CANNOT BE ECLIPSED FOR LONG.



OVERALL CHAMPHIONSHIP
ACHIEVED BY OUR ECE
STUDENTS AT NATIONAL LEVEL
SYMPOSIUM AT NELLAI COLLEGE OF ENGINEERING



Batch (2019-2023)

Actively Participated & completed in

Namma Thoothukudi

MARATHON on APRIL 30, 2023





NAME: SHEEBHA PRISKILLAL I
IV ECE

Batch (2019-2023)

SECURED DISTRICT IST MARK IN

VISHARAD POORVARDH

DHAKSIN BHARATH HINDI

PRACHAR SABHA EXAMINATION
IN THE YAER OF AUG 2022

IF YOU BELIEVE IN YOURSELF AND HAVE DEDICATION AND PRIDE AND NEVER QUIT, YOU'LL BE A WINNER

ACADEMIC TOPPERS 2021 -2022





















NANO ROBOTICS

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

The reliable and accurate methods for Nano manipulation is by using tip Scanning the of a **Probe** Microscope (SPM) as a sensorv robot, in ambient air or in liquids and at room temperature. These methods involve a human in the loop to compensate for the many spatial involved uncertainties in manipulation and which are due to such phenomena_as thermal drift or piezoelectric creep and hysteresis. Experience at LMR with assembling single electron transistors. nanowires, Nano waveguides and other Nano device prototypes has shown that automation is needed if SPM manipulation is to be used for complex building the patterns required by new nano devices and systems. The current addresses automation issues across high-level board, from planning for the assembly of nanopartide patterns, to error compensation for SPMs.



Nano robotics is concerned with (1) manipulation of Nano scale objects by using micro or macro devices, and (2) programming and construction robots with overall dimensions at the Nano scale. This covers both of these aspects. Nano manipulation is the most effective process developed until now for prototyping of Nano systems, and rapid prototyping is important to validate designs and optimize their parameters. Nano manipulation is also useful to repair or modify structures built by other means. Nano robots have dimensions comparable to those of biological cells, and are expected to have remarkable applications in health care and environmental monitoring. For example, they might serve as programmable artificial cells for early detection destruction and pathogens. The initial research is biased towards Nano manipulation. Work on Nano robot construction has begun at a low level and will increase as the project evolves.

TONGUE DRIVE SYSTEM

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

In the Tongue Drive System (TDS), the motion of the tongue is traced by an array of magnetic sensors, which measure the magnetic field generated by a small permanent magnet, the size of a grain of rice that is embedded in a biocompatible material such as titanium, and attached to the tongue through piercing, implantation, or adhesion. The magnetic sensors can be either mounted on a dental retainer and clipped on the outside of the teeth (internal TDS or iTDS) or on a headset (external TDS or eTDS) positioned near the cheeks. Sensor outputs are amplified, multiplexed, digitized, and transmitted wirelessly to an external controller unit.

Signals received by the external controller, which can be a portable computer or a smartphone are processed permanent magnet and consequently the tongue position within the oral cavity. We can assign a certait particular tongue movement in software and customize the system for each individual user. These user-defined control functions may then be used to operate a variety of devices and equipments including computers, phones, and powered wheelchairs.



The signals from the magnetic sensors are linear functions of the magnetic field, which is a continuous position-dependent property. Thus a few sensors are able to capture a wide variety of tongue movements. This mechanism provides a tremendous advantage over switch based devices in that the user has the options of proportional, fuzzy, or adaptive control, which can offer smoother, faster, and more natural control over the environment.



SMOOTH-TALKING AI ASSISTANTS

-Mr.G.Thomas Albert M. Tech.,
Asst Prof / ECE

New techniques that capture semantic relationships between words are making machines better at understanding natural language. We're used to assistants--Alexa playing music in the living room, Siri setting alarms on your phone-but they haven't really lived up to their alleged smarts. They were supposed to have simplify our lives, but they've barely made a dent. They recognize only a narrow range of directives and are easily tripped up by deviations.

But some recent advances are about to expand your digital assistant's repertoire. In June 2018, researchers OpenAl at developed a technique that trains an Al on unlabeled text to avoid expense the and time categorizing and tagging all the data manually. A few months later, a team at Google unveiled a system called BERT that learned how to predict missing words by studying millions of sentences.



In a multiple - choice test, it did as well as humans at filling in gaps. These improvements, coupled with better speech synthesis, are letting us move from giving Al assistants simple commands to having conversations with them. They'll be able to deal with daily minutiae like taking meeting notes, finding information, or shopping online.

Some are already here. Google Duplex, the eerily human-like upgrade of Google Assistant can pick up your calls to screen for spammers and telemarketers. It can also make calls for you to schedule restaurant reservations or salon appointments.

RECENT TECHNOLOGIES

-MRS. A. MABEL RAJAKUMARI M.E ASST PROF/ ECE



5G TECHNOLOGY:

4G - the mobile network that's used around the world to make calls, send messages and surf the web. Now there are plans for 4G to be replaced by 5G. 5G – a new, faster network that has the potential to transform the internet. 5G is a defined software network means that, while it won't replace cables entirely, it could replace the need for them by largely operating on the cloud instead. This means it will have a 100x better capacity than 4G which will dramatically improve internet speed. example, to download a two-hour film on 3G would take about 26 hours, on 4G you'd be waiting 6 minutes and on 5G you'll be ready to watch your film in just over three and a half seconds. But it's not just inter- net capacity that will upgraded. Response times will also be much faster

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 that travel at airline pods pressurized speed through tubes using electric propulsion and magnetic levitation, the concept promises to slash journey times be- tween major cities from several hours to a matter of minutes. While it may fiction. feel like science 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 cur- rent is applied, a bright light is emit-ted. Currently OLED Displays are made 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 dis- plays. OLEDS are considered by consumers and professional alike to be the best displays ever.

3D PRINTING:

3D printing technology already changing the way we produce objects from tools and toys to clothing and even body parts. 3D printing is part of a known additive process as manufacturing, where an object is created by adding material by layer. **Additive** laver manufacturing allows designers create complex parts for to 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.



RUBBER BAND ELECTRONICS

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

This form of electronics offers hiah stretchability twistability like stretchable LED arrays (an implantable device) moasuring the for heart's electrical output and an electrode array that melts on to the surface of the brain. They stretch to a small amount and potential application requires a device to stretch like a rubber band. Then modical devices can be integrated into the human body.

Recently, a porvus polymer and liquid bends metal that stretches to more than 200% of their original size has been found. It consists of ahighly porous 3D using vloq structure dimethylsiloxane which stretches to 3 times its original size and a liquid metal (EGaln) inside the pores that allowed electricity to flow consistently through material.



even when stretched excessively. It can be stretched and released 10,000 times without losing any conductivity at alL The PDMS is poured onto an oxygen plasma treated 3D template. Spin casting with various spin speeds ranging from 1000 to 7000 rpm enables control over the thickness of the upper residual layer of the solid PDMS. As spin speed increases. the thickness of the layer decreases. After the full curing, the template is removed by the developer using acetone or N:Methyl-2 pyrrolidone (NMP). The 3D structure can be patterned arbitrary forms using the additional amplitude masks The images show the 3D images structured into a series of lines, a flour leaf clover and the last one is the combination of the above two.



Embedded Systems with Artificial Intelligence -Mr.J.Swinglin M.E., AP/ECE

Current technological trends such as Industry and the smart factory are changing industrial value creation processes at profound level, a characterized by a higher degree of connectivity, digitization, and automation. All involved components, including machines, robots, transfer and handling systems, sensors, and devices. acquisition image are • networked consistently and communicate with one another via a variety of protocols Innovative trends in robotics are also changing the face industrial production. A new generation of smaller, more compact and more mobile robots are shaping highly-automated image of the assembly halls. Collaborative robots (cobots) share certain tasks with their colleagues, work closely human together, and often even hand workpieces another. to one addition, cobots can be quickly and flexibly retooled, enabling them to be used for a variety of production tasks.

Using deep learning in embedded applications Today, learning features are already being used in many embedded vision applications. What these all applications have in common is that they typically generate large volumes of data and frequently involve non-industrial scenarios, such as autonomous driving. The vehicles are already relevant equipped with numerous sensors and cameras that collect digital data from prevailing traffic conditions. Integrated vision software analyzes the data streams in real time with the aid of deep learning algorithms. This makes it possible, for example, to recognize situations, process their information, and use it to precisely control the vehicle - which is what makes autonomous driving possible in the first place. Deep-learningembedded based technologies are used in the smart city environment.



TONGUE DRIVE: A TONGUE-OPERATED ENVIRONMENTAL CONTROL SYSTEM

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

Assistive technologies play a critical role in the lives of people with severe disabilities and help them to lead independent self-supportive lives. Persons severely disabled as a result of causes ranging from traumatic brain and spinal cord injuries to stroke and cerebral palsy generally find it extremely difficult to carry out everyday tasks without continuous help. Assistive technologies that help them communicate their intentions effectively and control their environment.

In the Tongue Drive System (TDS), the motion of the tongue is traced by an array of magnetic sensors, which measure the magnetic field generated by a small permanent magnet, the size of a grain of rice that is embedded in a biocompatible material such as titanium, and attached to the tongue through piercing, implantation, or adhesion. The magnetic sensors can be either mounted on a dental retainer

and clipped on the outside of the teeth (internal TDS or iTDS) or on a headset (external TDS or eTDS) positioned near the cheeks. Sensor outputs are amplified, multiplexed, digitized, and transmitted wirelessly to an external controller unit.

We can assign a certain particular tongue movement in software and customize the system for each individual user. These user-defined control functions may then be used to operate a variety of devices and equipments including computers, phones, and powered wheelchairs.

The signals from the sensors are linear functions of the magnetic field, which is a continuous mechanism provides tremendous advantage over switch based devices in that the user has the options of proportional, fuzzy, or adaptive control, which can offer smoother, faster, and more natural control the over environment.

BUBBLEPOWER

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

SONOFUSION IS TECHNICALLY KNOWN ACOUSTIC INERTIAL CONFINEMENT FUSION. IN THIS WE HAVE A BUBBLE COUSTER (RATHER THAN A SINGLE BUBBLE) IS SIGNIFICANT SINCE WHEN THE BUBBLE CLUSTER IMPLODES THE PRESSURE WITHIN THE BUBBLE DUSTER MAY BE GREATLY INTENSIFIED. THE CENTRE OF THE GAS BUBBLE **CLUSTER SHOWS** PRESSURE DISTRIBUTION DURING THE BUBBLE CLUSTER IMPLOSION PROCESS. IT CAN BE SEEN THAT, DUE TO CONVERGING SHOCK WAVES WITHIN THE BUBBLE CLUSTER. THERE CAN BE SIGNIFICANT PRESSURE INTENSIFICATION IN THE INTERIOR OF THE BUBBLE DUSTER. THIS LARGE LOCAL LIQUID **PRESSURE** (P>1000 BAR) WILL **STRONGLY COMPRESS THE INTERIOR BUBBLES WITH IN THE** CLUSTE, LEADING TO CONDITIONS SUITABLE FOR THERMONUDEAR FUSION. MORE OVER DURING THE EXPANSION PHASE OF THE BUBBLE DUSTER DYNAMICS. COALESCENCE OF SOME OF INTERIOR **BUBBLES IS EXPECTED, AND THIS WILLEAD TO THE** IMPLOSION OF FAIRLY LARGE INTERIOR BUBBLES WHICH PRODUCE MORE ENERGETICIMPLOSIONS. THE APPARATUS CONSISTS OF A CYLINDRICAL PYREX GLASS FLASK 100 M.M. IN HIGH AND 65M.M.IN DIAMETER. A LEAD-ZIRCONATE-TITANATE CERAMIC PIEZOELECTRIC CRYSTAL IN THE FORM OF A RING IS ATTACHED TO THE FLASK'S **OUTER SURFACE.**



THE PIEZOELECTRIC RING WORKS LIKE THE LOUD SPEAKERS IN A SONOLUMINESCENCE EXPERIMENT, ALTHOUGH IT CREATES MUCH STRONGER PRESSURE WAVES. WHEN A POSITIVE VOLTAGE IS APPLIED TO THE PIEZOELECTRIC RING, IT CONTRACTS; WHEN THE VOTAGE IS REMOVED, IT EXPANDS TO ITS ORIGINAL SIZE.

How Sonofusion Works

THE FLASK **FILLED** THEN WITH COMMERCIALLY AVAILABLE **DEUTERATED** ACETONE (C3 D60), IN WHICH 99.9 PERCENT OF THE HYDROGEN ATOMS IN THE ACETONE MOLECULES ARE DEUTERIUM (THIS ISOTOPE OF HYDROGEN HAS ONE PROTON AND ONE **NEUTRON IN ITS NUCLEUS). THE MAIN REASON** TO CHOOSE DEUTERATED ACETONE IS THAT ATOMS OF DEUTERIUM CAN UNDERGO FUSION MUCH MORE EASILY THAN **ORDINARY** HYDROGEN ATOMS. ALSO THE DEUTERATED FLUID CAN WITHSTAND SIGNIFICANT TENSION (STRETCHING) WITHOUT **FORMING** UNWANTED BUBBLES. THE SUBSTANCE IS ALSO RELATIVELY CHEAP. EASY TO WORK WITH, AND NOT PARTICULARLY HAZARDOUS.

GSLY SUCCESSFULLY LAUNCHES SOUTH ASIA SATELLITE

-Mrs.Ananthi M.E.,



This is the fourth consecutive success achieved by GSLV carrying indigenously developed Cryogenic Upper Stage. In its oval shaped GTO, the South Asia Satellite is now orbiting the Earth with a perigee (nearest point to Earth) of 169 km and an apogee (farthest point to Earth) of 36,105 km with an orbital inclination of 20.65 deg with respect to the equator Few seconds before the launch countdown reached zero, the four liquid propellant strap-on motors of GSLV-F09, each carrying +2 tons of liquid propellants,

At count zero and after confirming the normal performance of all the four strap-on motors, the 139 ton solid propellant first stage core motor was ignited and GSLV lifted off at 16:57 IST. The major phases of the flight occurred as scheduled. About seventeen minutes after lift-off, South Asia Satellite was successfully placed in GTO.

Soon after separation from GSLV, the two solar arrays of the satellite were automatically deployed in quick succession and the Master Control Facility (MCF) at Hassan in Karnataka assumed control of the satellite.

The South Asia Satellite will be commissioned into service after the completion of orbit raising operations and the satellite's positioning in its designated slot in the GSO following in-orbit testing of its payloads.

Change your life today. Don't gamble on the future, act now, without delay.

BE UNIQUE

If people aren't different, how are we going to get anywhere in life?.... Society tells us that in order to 'fit in' we all must be the same. This is not valuable because when we all act same, nothing new will ever come out.

When you try to 'fit in', you may start to conform to things with which you don't agree. Which may create to lose a sense of good or wrong according to your personality. Dr. Secuss, once said, "be who you are and say what you feel; because those who mind don't matter, and those who matter don't mind". This quote tells us to be unique and act as we ware made.

When people conform to one another they begin to live their lives the way others want them to, not the way they want to live out their lives. A small example: if you are told that drinking is okay by your friends, at some point you may forget your morals and go

'Always Remember that you are absolutely unique, just like anyone else'

along with it solely because they are doing it.

'Uniqueness is what creates the world'

Trying to be like everyone else is hard work and doesn't pay off you must be yourself to achieve your

goals. When you try to 'fit in' and be the same as those around you, you are diminishing who truly you are. In order for change to access, you must have different

viewpoints and beliefs. What makes you unique? Your

experiences, look at all initiative you took, problems

you solved and achievements you created makes you



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



HOW TO FIND YOUR DREAM JOB WHEN YOU DON'T KNOW WHAT YOU WANT

-Sheebha Priskillal I , IV ECE (2019-2023)

Do you remember being 18 and worrying that you didn't have an answer or even an idea when people asked you what you were going to do for your first job, let alone an ideal career? That's totally normal - most of us don't just decide on a dream career right out of high school or settle on a field in college and stick with it for life. DREAM is that you look at your strengths, think about who you are, talk to yourself. people, educate consider your needs, and do what makes you happy at the end of the day. According to a recent survey by Gallup, 60% of millennials alone are looking to switch jobs(opens in a new tab). So, it's not unusual at all to be thinking "I don't know what career I want" or even "I need a career change but don't know what to do."

The best way to predict the future is to create it

This article shares six tips for how to figure out what job you want, what you want to do, find a career you love, and overcome the obstacles of indecision and not knowing what you want.

- 1. LEAD WITH YOUR STRENGTHS
- 2. EVALUATE YOUR PAST TO AVOID A DEAD END
- 3. TALK TO PEOPLE TO LEARN WHAT YOUR DREAM JOB IS
- 4. TAKE CLASSES FIRST, FIGURE OUT WHAT CAREER YOU WANT LATER
- 5. CONSIDER WHAT WORK ENVIRONMENT YOU NEED
- 6.DO WHAT MAKES YOU HAPPY
 (EVEN IF YOU DON'T KNOW
 WHAT THAT MEANS FOR A
 CAREER YET)

By following the tips above you can develop a clear sense of what makes you tick career-wise so you'll be able to find job opportunities and a career path that genuinely fits your wants and needs.





















LAST YESR 2021-2022

PLACEMENT RECORDS OF ECE



Name: NANDINI P / (ECE)
Designation: VLSI Engineer

Batch: 2018 - 2022



Name: SARAVANAN B/ (ECE)

Designation: Production

Batch: 2018 - 2022





Name: ANISH MATHAN M / (ECE)

arasan

Designation: Jr Software Engineer (MERN)

Batch: 2018 - 2022



Name: SUDARVIZHI K/ (ECE)
Designation: Production

Batch: 2018 - 2022





Name: GRACELIN J / (ECE)

CubeMatch

Designation: Associate HR Trainee

Batch: 2018 - 2022

TECHNOSOFT



Name: PRIYADHRSHINI J/ (ECE)
Designation: JAVA Programmer

Batch: 2018 - 2022





Name: PON SAMUEL D/ (ECE)

Designation: Embedded Engineer

Batch: 2018 - 2022





Name: THANGASELVI K/ (ECE)
Designation: Production

Batch: 2018 - 2022





ENGINEER'S DAY CELEBRATION

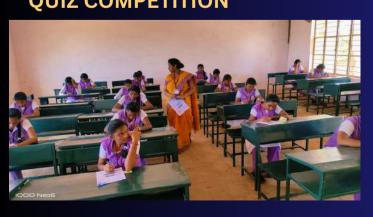
SPECIAL DEVELOPMENT PROGRAM













ஏரல், அக். 13: சாயர்புரம் போற்பியல் கல்லூரியில் பொறியாளர் தின விழா கொண்டாடப்பட்டது. கல்லூரி முதல்லவர் ஜாபித்த் வரவேற்றார். கிறப்பு அழைப்பாளர்களாக பிரஷ் ஓ பிரஷ் திறுவனத்தின் நிறுவனத்தின் நிறுவனத்தின் நிறுவனத்தின் நிறுவனத்தின் நிறுவனத்தின் நிறுவனத்தின் நிறுவனத்தின் நிறுவனத்தின் நிறுவனத்தின் நிறுவனர் பியோதேம்ஸ் அடுபோர் கலந்து கொண்டு தங்களது அனுப்பியிகள் மற்றும் வேலை

வாய்ப்பு வழிகாட்டு தல் பற்றி மாண வர்களுக்கு எடுத்துரைத்தனர். மின்ன னுவியல் மற்றும் தொலைத் தொடர்பு துறை சார்பில் மாணவர்களுக்கு வினாடி வினா போட்டி நடத்தப் பட்டது. துறை தலைவர் செல்வரதி பொன்மலர் நன்றி கூறினார். ஏற்பா டுகளை கல்லூரி தாளா ர் ராஜேஷ் ரவிச்சந்தர், முதல்வர் ஜாபிந்த், துறை தலைவர்கள் மற்றும் ஒரும் கணைப்பாளர் ஆல்வினா மேர்தி ஆடியோர் செய்தி ருந்தனர்.

Monoson - mais - 13.10.2022



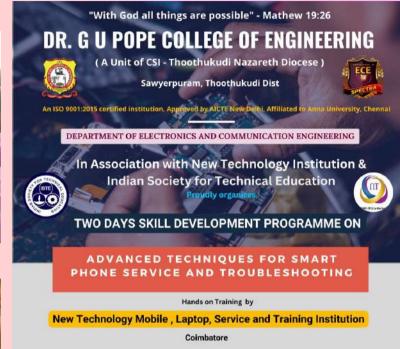


TWO DAYS SKILL DEVELOPMENT PROGRAM SMART PHONE SERVICE & TROUBLESHOOTING









MRS. S. SELVARATHI PONMALAR

DATE: 27-03-2023 , 28-03-2023

VENUE : ECE LAB

HOD/ ECE

CO-ORDINATORS

MR.G. THOMAS ALBERT

DR.J.JAPHYNTH

PRINCIPAL

MR.J. SWINGLIN JEEVADURAI

AP/ ECE

THIRU P PATESH PAVICHANDAR

CORRESPONDENT



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INTERNSHIP AND INPLANT TRAINING COMPLETION











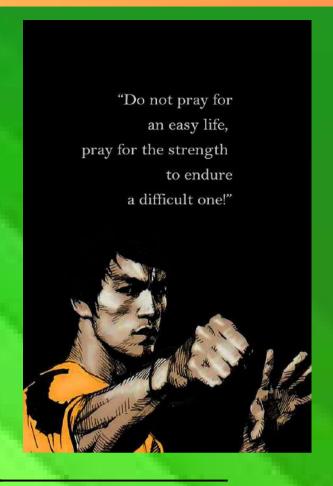








Nithi varsh .R III ECE (2020-2024)



Hope is the thing with feathers —
That perches in the soul —
And sings the tune without the words —
And never stops at all —



Subaitha. G IV ECE (2019-2023)





"Superman has his strength, Spiderman has his webs, you have both! My dad is the greatest hero of them all.

GAYATHRI G IV ECE (2019-2023)

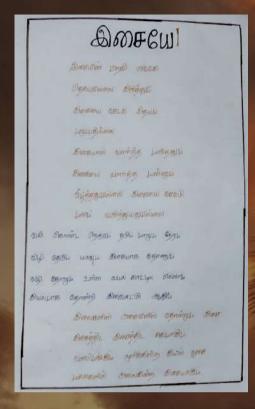
A man love his daughter more than anything... that's why every girl's first love

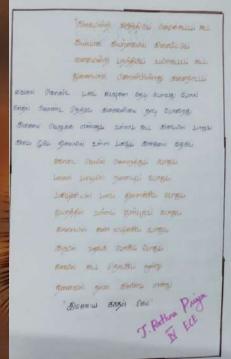




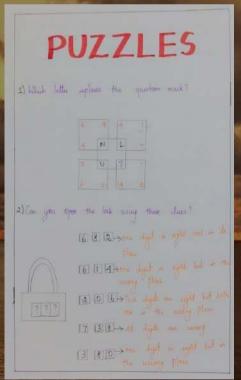
"I'm going to keep showing up as my best self and stay focused on my own path. That's how I know I'll win

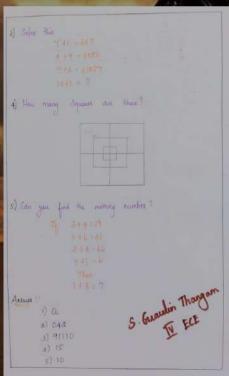
N. Mariya Shibani III ECE 2020-2024













GRACELIN THANGAM S
IV ECE
2019-2023







LEELA RANI R IV ECE 2019-2023



SNEKA M IV ECE 2019-2023







5 Ways You Could Be Inviting a Cybersecurity Attack

-ABIRAMI IV ECE (2019-2023)

In fact, it's often systemic and cultural issues between IT and non-IT executives, not technical competency or funding, that leave organizations exposed to cybersecurity attacks.

"These issues present opportunities for CIOs and CISOs to rethink how they engage senior non-IT executives prioritize security," says **Paul** Proctor, Distinguished **VP** Analyst at Gartner.You can reduce the risk of cyberattacks by addressing these leading causes of failure within your organization. Gartner has identified 5 of causes cybersecurity failure that coud leave organizations exposed to attacks.

1. Invisible systemic risk: Businesses make decisions every day that negatively impact their security readiness: for example, refusing to shut down a server for proper patching or choosing to keep working on old hardware and software to save budget. These unreported decisions lead to a of security false and sense likelihood the increase and severity of an incident.

Action: Recognize, report and discuss systemic risk as part of normal security governance.

2. Cultural disconnect

:Non-IT executives still see security as something that is "just there," like air or water. This means it isn't considered a part of business decisions. For example, a business leader requesting a new application is unlikely to include "security readiness" as a requirement.

Action: Put cybersecurity into a business context so executives can see the impact of their decisions.

3. Throwing money at the problem:
You can't buy your way out — no matter what you spend, you won't be perfectly protected against cyberattacks. By trying to stop every risky activity, you will likely damage your organization's ability to function.

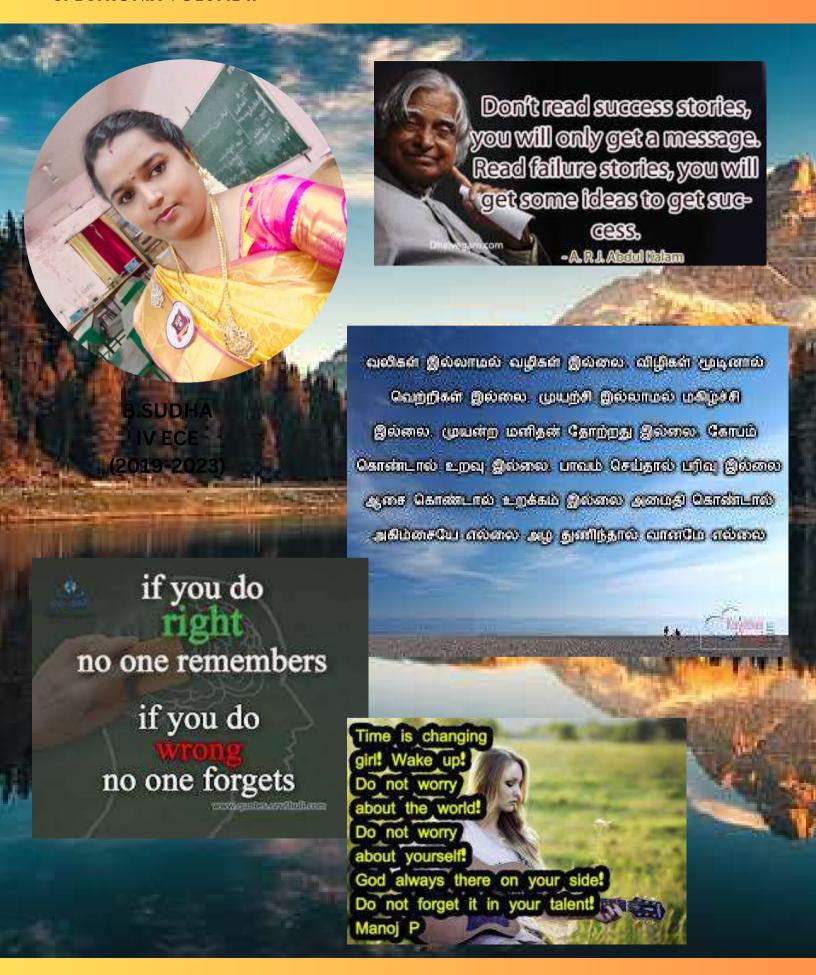
Action: Avoid overinvestment in security that raises operational costs but damages the organization's ability to achieve business outcomes.

4. Security as "defender": If security officers are treated as (and act as) defenders of the organization, it creates a culture of no. For example, they might block the release of a critical application due to security concerns without considering the business outcomes the application supports.

Action: Position security as the function that balances the need to protect with the need to run the business.

5.Lack of transparency: boards and Some executives simply do not want to hear or acknowledge that security isn't perfect. Board presentations filled with good news about the progress that has been made in security, with little or no discussion about gaps opportunities for improvement. We know of company that decided to move security under legal counsel so that discussions are privileged.

Action: To tackle the challenges, IT and non-IT executives must be willing to understand and talk about the realities and limitations of how security works.







RIVERS OF THE WORLD WORD SEARCH PUZZLE

Find and cross out all the listed words. The words may go horizontally, vertically, diagonally, not backwards.

ODER ADIGE ORANGE AGANO ORINOCO **AMAZON** PARANA BUG PEK CEDAR RED CONGO RHINE DAL RHONE DANUBE ROCK DART ROE DVINA SEINE FIBE SOMME **FUPHRATES** TANANA GREY TAW HUANG THAMES HUDSON TIGRIS INDUS UBANGI JORDAN. VOLGA KAMA YANGTZE LENA YELLOW MAAS YUKON MEKONG ZAMBEZI MEON ZORN NIAGARA

NILE

G CKE R 0 G K M 0 E 7 B E D N D U G N G S A 0 G R G G



ROHINI II ECE (2021-2025)

My life is enriched in a myriad of ways.

Like a cool breeze on a sweltering day.

like a ray of sunshine parting glowering clouds.

you lift me up.

In good times, we soar.

like weightless balloons
over neon rainbows. In bad times, you are soothing balm

for my pummeled soul.
I learn so much from you;

you help me see old things in new ways.

I wonder if you are aware

of the bright seeds you are sowing in me.

I'm a better person for knowing you.

so that everyone I interact with

is touched by your good effect on me.

You relax me, refresh me, renew me.

Your bounteous heart envelops me in joy and love and peace.

May your life be filled with dazzling blessings,

just as I am blessed

by being your friend.



SHIVANI II ECE (2021-2025)





RAJAH MANI KUMAARAN K II ECE (2021-2025)





DR. G U POPE COLLEGE OF ENGINEERING SAWYERPURAM, THOOTHUKUDI



DAY NEWS -30.08.22 - DEPT OF ECE







Students of Department of ECE have actively participated in Oral presentation & Technical Seminar on Nuclear Energy for sustainable Development of India Conducted by Pope's Arts and Science College Sawyerpuram, Jointly organised with Kudankulam Nuclear Power plant.





Voice of Alumni

ARVIND BALAJI
BATCH 2005-2009

CYBER SECURITY ANALYST - BANGALORE



"I am proud to be an alumnus of the ECE department at Dr. G. U. Pope College of Engineering. The education I received here has helped me immensely in my professional career. The faculty and staff are highly knowledgeable and supportive, and the curriculum is well-designed to provide students with a holistic learning experience."



"The ECE department at Dr. G. U. Pope College of Engineering offers an excellent platform for students to learn, innovate, and excel. The department encourages students to participate in various technical and cultural events, which helped me develop my interpersonal and leadership skills.

LANGUAGE TRAINER



KANAGA LAKSHMI BATCH 2007-2011

Voice of Alumni

BANKER

"The ECE department at Dr. G. U. Pope College of Engineering has a great reputation for producing highly skilled and competent engineers. The faculty members are experts in their respective fields, and they go out of their way to help students with their academic and personal needs. The department has a strong alumni network, which has helped me connect with industry leaders and experts."



KAJA LASHMI BATCH 2007-2011



US BASED COMPANY

My college days are the best part of my life. My department encouraged me to explore my talent & potential by providing an exceptional integrated learning environment. I am really grateful to my teachers who have changed my whole aspect towards learning. I express my heartfelt thanks to the institution for giving me the perfect opportunity to explore myself I am grateful to be part of such an institution



SAM JOEL BATCH 2009-2013







DR. G U POPE COLLEGE OF ENGINEERING (A Unit of CSI - Thoothukudi Nazareth Diocese

DEPARTMENT OF ECE

Day News

18-04-2023

ECE



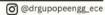
SIXTH NATIONAL LEVEL CONFERENCE

on Innovative Technologies in Engineering NCITE23

A National level Technical Conference was conducted today on behalf of GUPCE, about 95+Students as 27 Batches from various colleges participated in our ECE department and presented their papers. The Best Paper Award was given to Nellai co as per the verdict of the Judges



mww.drgupopeengg.org



போப் பொறியியல் கல்லூரியில் அறிவுத்திறன் போட்டி



சாயர்புரம் போப் பொறியியல் கல்லூரியில் அறிவு திறன் போட்டி நடந்தது.

ஏரல், நவ. 1: சாயர்புரம் போப் பொறியியல் கல் **வாரியில் மின்னனு**வியல் மற்றும் தொலை தொடர் **புத்துறை சா**ர்பில் ஊடகத் ன் மற்றும் அறிவுத்திறன் ார்ந்த போட்டி மற்றும்

பரிசளிப்பு விழா நடந்தது கல்லூரி முதல்வர் ஜாபிந்த் வரவேற்றார். சி.எஸ்.ஐ. தூத்துக்குடி-நாசரேத் திரு மண்டல துணைத்தலை வர் தமிழ்ச்செல்வன், 'லே' செயலாளர் நீகர் பிரின்ஸ் மோகன்ராஜ் அருமைநாய கம், உயர்நிலை கல்விக்கு மு செயலாளர் பிரேம்குமார் சிறப்புரை ஆற்றினர். கல் லூரித்தாளாளர் ராஜேஷ் ரவிச்சந்தர் வாழ்த்திப் பேசினார் போட்டிகளில் வெற்றிபெற்ற மாணவ. மாணவிகளுக்கு பரிசுகள் வழங்கப்பட்டன. முன்ன தாக துறைத் தலைவர் செல்வரதி பொ<mark>ன்மலர</mark>் அறிக்கை வாசித்தார். உதவிப் பேராசிரியை ஆல்வினா மேரி நன்றி கூறினார். ஏற்பாடுகளை ஒருங்கிணைப்பாளரான உதவிப் பேராசிரியை பிரிய தர்ஷினி உள்ளிட்டோர் செய்திருந்தனர்.

CONTESTS DETAILS

SHORT FILM MAKING DOCUMENTARY VIDEO PAPER PRESENTATION PIXELSHOT (Photography) BRAND MAKER (Logo) MEMESTER (Meme) TYPE RACER MOCK INTERVIEW WEB DESIGNING (HTML /CSS) MINI EXPO (Project) CLASH OF MINDS (Talent Exam) CHECKMATE (Chess) CIRCUIT REBUILD (EEE / ECE) THINK AND LINK CODE DEBUG AQUA JET LAUNCH (MECH / CIVIL)

PANELIST DETAILS

Mrs.S.SELVARATHI M.E., MISTE HOD / ECE

Dr.J.JAPHYNTH M.E., Ph.D., MISTE PRINCIPAL

Thiru.R.RAJESH RAVICHANDAR CORRESPONDENT

CO-ORDINATORS

Mrs.E. ALWINA MERCY M.E., AP/ ECE Mrs.J. PRIYADHARSHINI M.E., AP/ ECE





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Dear Staff and Students kindly submit your Articles for SPECTRONIX volume - III

SCAN & SUBMIT



ECE 2019-2023 Batch



"No period of my life has been one of such unmixed happiness as the four years which have been spent within college walls."

"WITH GOD ALL THINGS ARE POSSIBLE" MATH 19:25



SPECTRA STUDENTS ASSOCIATION DEPARTMENT OF ECE

DR G U POPE COLLGE OF ENGINEERING