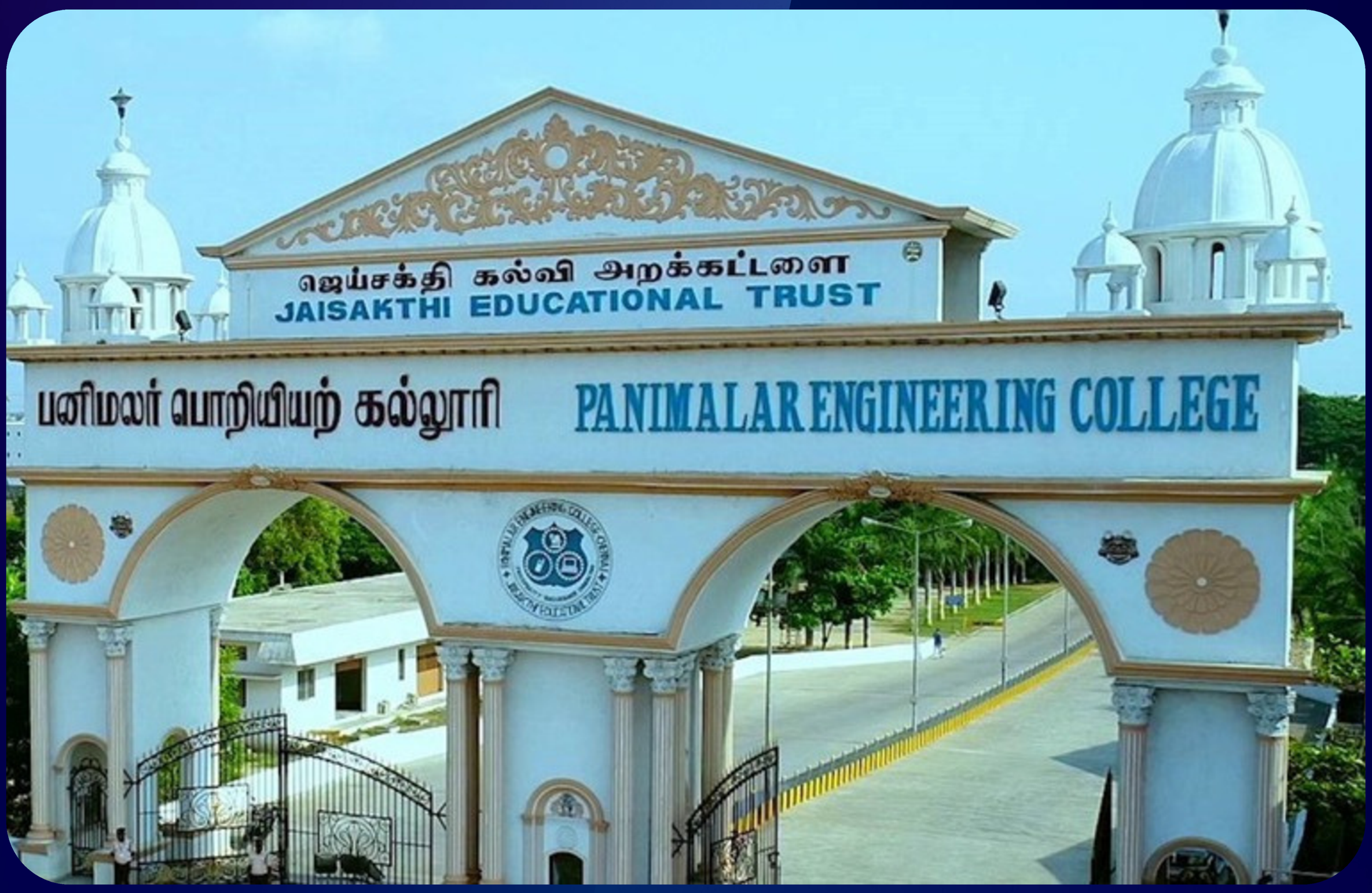
PANIMALAR ENGINNERING COLLEGE

AN AUTONOMOUS INSTITUTION

Affiliated to Anna University, Chennai
(JAISAKTHI EDUCATIONAL TRUST)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

NEWSLETTER

2024-2025

ISSUE-2(EVEN SEMESTER)

WEBSITE :- https://panimalar.ac.in

MESSAGE

DR. P. CHINNADURAI, M.A., PH.D.
SECRETARY & CORRESPONDENT



Success is all about respecting the past and creating the future. I wish the institution the very best in delivering quality education to all walks of the society.



DR. C. SAKTHI KUMAR, M.E., PH.D. DIRECTOR

As we speak, technology around us changes. Innovation has become the buzzword. We at Panimalar group of institutions, create and carve out a niche for the students, and we make them believe that "Education for Life" rather than "Education for Living".

MRS. C. VIJAYARAJESWARI DIRECTOR

One of the greatest challenges and opportunities in the modern day is preparing today's students for tomorrow's needs. We tutelage the students to embrace the change and move forward in this competitive environment





DR.SARANYASREE SAKTHI KUMAR, B.E.,M.B.A.,PH.D. DIRECTOR

At Panimalar, we identify student's potential, convert them into talent and elevate the talent to infinite possibilities. We condition the students for the challenges ahead and groom them to be responsible citizens.

MESSAGE

DR. K.MANI, M.E, PH.D
PRINCIPAL
PANIMALAR ENGINEERING COLLEGE



I am pleased to share with you the newsletter from Department of CSE, Panimalar Engineering College. You will be delighted to go through this volume that will connect you to the many activities of this dynamic department. Let this news letter and series of such letters keep us all continuously informed about all the developments of the department in the years to come. I wish the Head of the Department, all the staff and students of the department for having taken the best initiatives in bringing out this Newsletter

DR.L.JABASHEELA , M.E .,PH.D.,
PROFESSOR & HEAD
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



On behalf of the Department of CSE, Panimalar Engineering College, it gives us immense pleasure in presenting this newsletter. It was exhilarating being the editors of this issue. This newsletter focuses on the happenings of the semester along with the incredible achievements of our students and staff. We humbly hope that this newsletter will be giving you an excellent insight on the various achievements by the members of our department

FACULTY EDITOR : MRS. K. CINTHUJA, M.E.(CSE)

STUDENT EDITOR : K M VENKATACHALAM (II CSE)
R.VIGNESH KUMAR (II CSE)

VISION

To create a dynamic academic environment that nurtures technologically proficient individuals with a spirit of research, innovation and effective communication while instilling strong social awareness and national responsibility, enabling them to excel in their fields.

MISSION

- M1: To establish a dynamic academic environment with dedicated faculty and modern resources, fostering expertise in both fundamental concepts and emerging computing domains.
- M2: To equip students with industry-relevant skills, critical thinking abilities, and leadership qualities, while instilling ethical values and a sense of responsibility through knowledge dissemination and technological advancements for societal progress.
- M3: To drive collaborative innovation through partnerships with academia and industry, ensuring seamless exchange of expertise, leading to intellectual property creation, product development, commercialization, and sustained research funding

ABOUT THE DEPARTMENT



The Computer Science and Engineering Department offers the following programs.

B.E – Computer Science and Engineering (4 Years)
M.E. – Computer Science and Engineering (2 Years)
Ph.D - Computer Science and Engineering (Full time / Part time).

The Computer Science and Engineering Department offers both Undergraduate and Postgraduate programs. It provides an excellent ambiance for students to learn and acquire the necessary skills required by the IT Industry. Technological innovation is so rapid in this field that continuous education is essential to enhance the skill set of students keeping in pace with the current trends. The department has experienced faculty members who are fully committed to teaching and research. The students have access to well equipped, state-of-the-art laboratories. A wide range of activities undertaken in the department allow the students to gain contemporary knowledge of the basic problems in the IT industry. The advance curriculum requires the students to take up a broad spectrum of courses with special emphasis on desired areas of specialization. Hence, the department has brought out exceptional engineers in the past and will continue to do in the years to come. The Department maintains an excellent interaction with IT industry and organizes regular guest lectures by experts, industrial visits, internships etc. and stands for industry – Institute collaboration

STAFF ACHEIVEMENTS

PK Singla
Associate Professor
pksingla@gmail.com
pksingla@nitttrchd.ac.in

NATIONAL INSTITUTE OF TECHNICAL TEACHERS' TRAINING AND RESEARCH

(Established by Ministry of Education, Government of India)

SECTOR 26 CHANDIGARH 160 019

Phone: **2759567 [O]**
2705830 [R]
9872023302 (M)
9041013302 (M)

July 9, 2024

Ref. No. NITTTR/CDC/PKS/0709/2 **THROUGH E-MAIL**

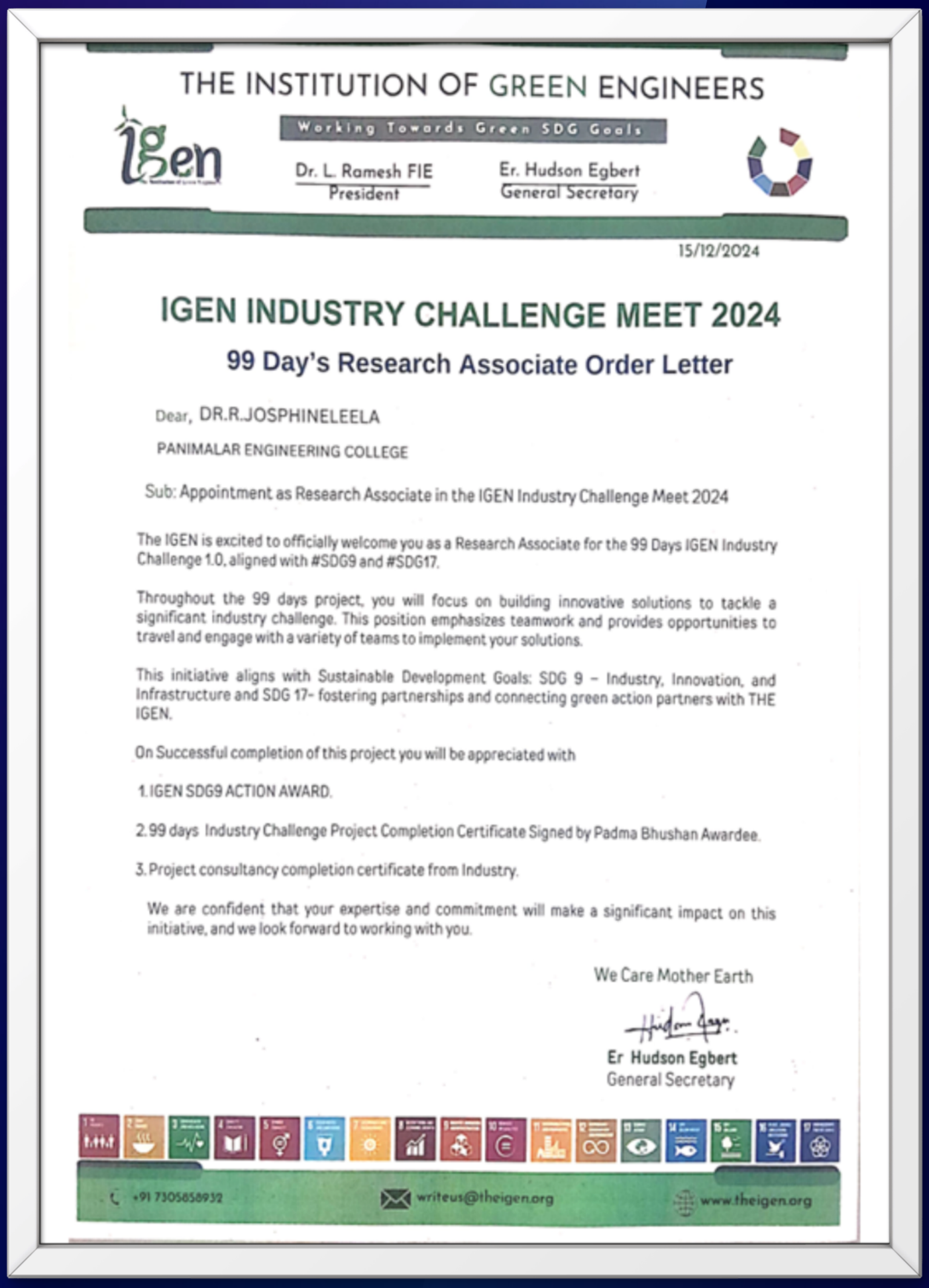
TO WHOM IT MAY CONCERN

This is to certify that Dr. R. Josphinleela working at Panimalar Engineering College, Chennai worked as a Local Coordinator for the Training Programme held at Panimalar Engineering College, Chennai (Nodal Centre), during the National Level Online Short-Term Course (ICT- 2) titled as 'Developing Ethics and Values in Curriculum Implementation' From 1-5 July, 2024. The programme received an overwhelming response and it was well-received and appreciated by the participants. We are happy with the feedback from the participants from across India, who have mentioned that they have deeply benefitted from the course and will apply its teachings in their professional and person lives.

We like to acknowledge the excellent services rendered by Dr. R. Josphinleela during the above training programmes.

(Parmod Kumar Singla)
Coordinator of Programme
Associate Professor
Curriculum Development Centre
National Institute of Technical Teachers Training and Research
[Ministry of Education, Government of India]
Sector-26, Chandigarh - 160019 U.T. (India)

DR. R. JOSPHINELEELA FROM THE DEPARTMENT OF CSE WORKED AS A LOCAL COORDINATOR FOR THE TRAINING PROGRAMME HELD AT PANIMALAR ENGINEERING COLLEGE, CHENNAI (NODAL CENTRE), DURING THE NATIONAL LEVEL ONLINE SHORT-TERM COURSE (ICT-2) TITLED AS 'DEVELOPING ETHICS AND VALUES IN CURRICULUM IMPLEMENTATION'



THE INSTITUTION OF GREEN ENGINEERS

Working Towards Green SDG Goals

Dr. L. Ramesh FIE
President

Er. Hudson Egbert
General Secretary

15/12/2024

IGEN INDUSTRY CHALLENGE MEET 2024

99 Day's Research Associate Order Letter

Dear, DR.R.JOSPHINELEELA

PANIMALAR ENGINEERING COLLEGE

Sub: Appointment as Research Associate in the IGEN Industry Challenge Meet 2024

The IGEN is excited to officially welcome you as a Research Associate for the 99 Days IGEN Industry Challenge 1.0, aligned with #SDG9 and #SDG17.

Throughout the 99 days project, you will focus on building innovative solutions to tackle a significant industry challenge. This position emphasizes teamwork and provides opportunities to travel and engage with a variety of teams to implement your solutions.

This initiative aligns with Sustainable Development Goals: SDG 9 – Industry, Innovation, and Infrastructure and SDG 17- fostering partnerships and connecting green action partners with THE IGEN.

On Successful completion of this project you will be appreciated with

1. IGEN SDG9 ACTION AWARD.

2. 99 days Industry Challenge Project Completion Certificate Signed by Padma Bhushan Awardee.

3. Project consultancy completion certificate from Industry.

We are confident that your expertise and commitment will make a significant impact on this initiative, and we look forward to working with you.

We Care Mother Earth

Er Hudson Egbert
General Secretary

+91 7305858932 writeus@theigen.org www.theigen.org

DR. R. JOSPHINELEELA FROM THE DEPARTMENT OF CSE WAS ASSOCIATED WITH THE IGEN AS A RESEARCH ASSOCIATE FOR THE 99 DAYS IGEN INDUSTRY CHALLENGE 1.0, ALIGNED WITH #SDG9 AND #SDG17. THIS INITIATIVE ALIGNS WITH SUSTAINABLE DEVELOPMENT GOALS: SDG 9 – INDUSTRY, INNOVATION, AND INFRASTRUCTURE AND SDG 17– FOSTERING PARTNERSHIPS AND CONNECTING GREEN ACTION PARTNERS WITH THE IGEN..

TAMIL THAAI FOUNDATION

Central Govt Reg No - UDYAM-TN-01-0013285

~TAMIL THAAI FOUNDATION~

ICONIC AWARD 2023



This is to certify that,

DR. T. TAMILVIZHI

PROFESSOR
(COMPUTER SCIENCE & ENGINEERING),
PANIMALAR ENGINEERING COLLEGE,
CHENNAI

"OUTSTANDING RESEARCH AWARD-2023"

In Recognition of his/her excellent, efforts and achievements in being an Outstanding Person during the year 2023 by

"TAMIL THAAI FOUNDATION"

Congratulations on your Hard work!! Keep Shining!!..

G. Alakammai,
Founder and CEO

DR. T. TAMILVIZHI WAS HONOURED WITH THE “OUTSTANDING RESEARCH AWARD – 2023” BY “TAMIL THAAI FOUNDATION”

PANIMALAR ENGINEERING COLLEGE

(An Autonomous Institution – Affiliated to Anna University, Chennai)

(Jaisakthi Educational Trust)

Department of Computer Science & Engineering

Organizes

A Five Day Workshop on "Full Stack Development"

by

Mrs. E. Rajalakshmi, AP/CSE

Date: 30/09/2024 – 04/10/2024 Time: 07:30 to 08:30 PM (IST)

Venue: Online – MS TEAMS

https://shorturl.at/MG2VB

ALL ARE CORDIALLY INVITED

Dr. P. Chinnadurai, M.A., Ph.D
Secretary & Correspondent

Tmt. C. VijayaRajeswari
Dr. C. SakthiKumar M.E., Ph.D
Dr. Saranyasree Sakthikumar B.E., M.B.A., Ph.D
Directors

Dr. K. Mani, M.E., Ph.D, Principal
Convenor

Organizing Team

Dr. JABASHEELA L., Professor & Head/CSE
Dr. KAVITHA SUBRAMANI Professor/CSE
Dr. SUBEDHA V Professor/CSE

Coordinators

Mr. SATHYAMOORTHY K
Mrs. KANCHANA A
Mrs. SHOBANA M
Assistant Professors

A Five Day Workshop on "Full Stack Development"

Content

Team Link: https://shorturl.at/MG2VB

30/09/2024 - Session-1

Introduction about React

Environment Setup

React Components

React Render HTML

01/10/2024 - Session-2

React CSS Styling

React Props

Rendering Lists

React Events & Forms

02/10/2024 - Session-3

React Hooks

Setting the environment (MongoDB & Mongo Shell)

Introduction to MongoDB and Shell

03/10/2024 - Session-4

Create a Database – MongoDBCompass
Create the Backend

04/10/2024 - Session – 5

Connect UI to Backend (MongoDB)
CRUD Operations
emailjs

MRS. E. RAJALAKSHMI FROM THE DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING SUCCESSFULLY ORGANIZED A FIVE-DAY WORKSHOP ON "FULL STACK DEVELOPMENT." THE WORKSHOP AIMED TO PROVIDE PARTICIPANTS WITH HANDS-ON EXPERIENCE AND IN-DEPTH KNOWLEDGE OF BOTH FRONT-END AND BACK-END TECHNOLOGIES. THROUGH A SERIES OF INTERACTIVE SESSIONS, LIVE CODING DEMONSTRATIONS, AND PRACTICAL EXERCISES, ATTENDEES GAINED VALUABLE INSIGHTS INTO BUILDING DYNAMIC, RESPONSIVE WEB APPLICATIONS USING MODERN DEVELOPMENT FRAMEWORKS AND TOOLS. THE EVENT SAW ENTHUSIASTIC PARTICIPATION FROM STUDENTS AND FACULTY, ENHANCING THEIR TECHNICAL SKILLS AND PREPARING THEM FOR INDUSTRY-READY DEVELOPMENT ROLES.

STUDENT ACHEIVEMENTS



OUR 2ND YEAR STUDENTS HAVE DEVELOPED AND LAUNCHED VARIOUS MOBILE APPS IN GOOGLE PLAY STORE ON 22-2-2025 FELICITATED BY OUR GUEST MR.DILLI BABU FOR ENVISION

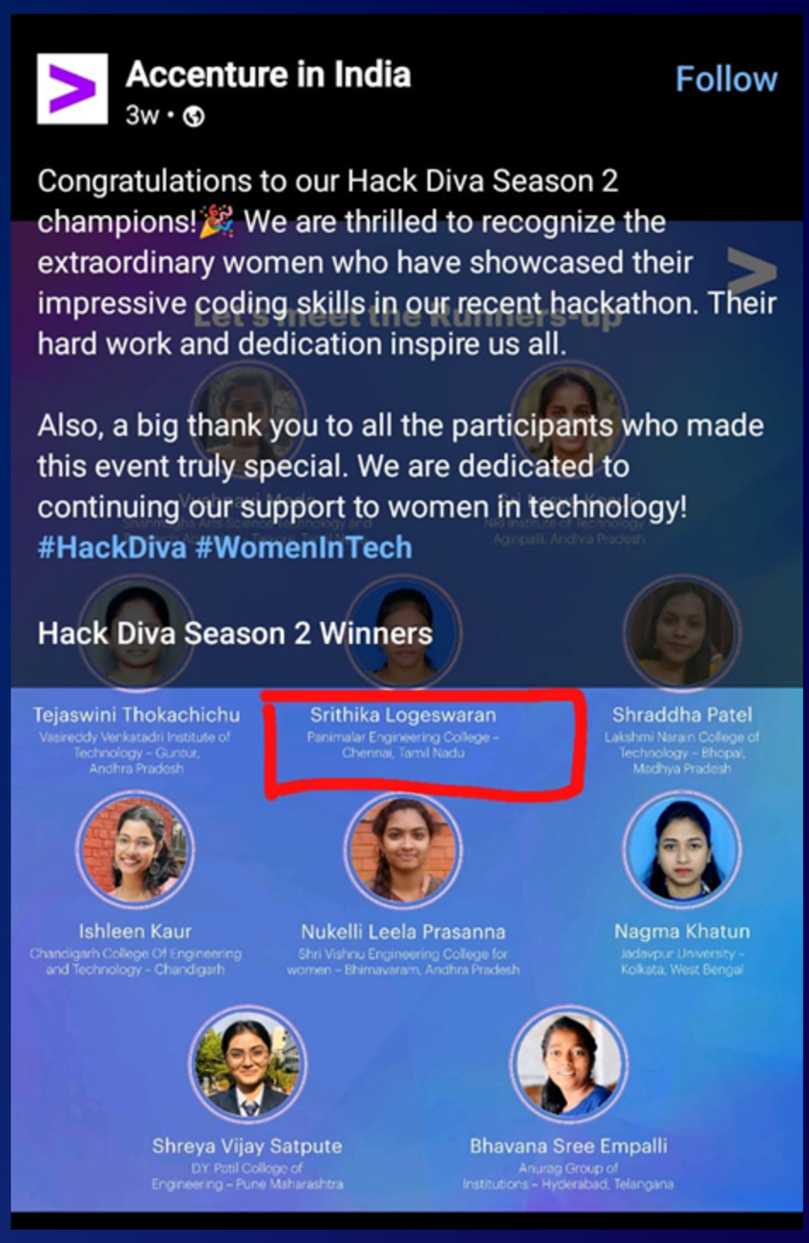


OUR 3RD YEAR STUDENTS WON FIRST PRIZE IN PAPER PRESENTATION HELD AT NEW PRINCE ENGINEERING COLLEGE AND GOT AI AND ML INTERNSHIP COUPON



OUR III YEAR STUDENTS WON 1ST PRIZE IN PAPER PRESENTATION AT VEL TECH MULTI TECH, AVADI WITH CASH AWARD OF RS.1500.

SRITHIKA LOGESWARAN WON THE HACK DIVA SEASON 2 ORGANIZED BY ACCENTURE IN INDIA.





STEVE, SIBYLL,SANDEEP OF II CSE WON THE FIRST PRIZE IN TALOS 2025 EVENT AT CHENNAI INSTITUTE OF TECHNOLOGY ON 12-02-2025



Government of Tamil Nadu

Entrepreneurship Development and Innovation Institute (EDII-TN)

No1. EDI Institute Road, SIDCO industrial Estate, Ekkattuthangal, Chennai -600032.

Innovation and Entrepreneurship Development Programme (IEDP-2023-24)

Best Academic EDII's Hackathon IInd Runner Up Award

(Third level -20 Best Innovative Ideas– 2023-24
Conducted for the students of higher education category)

This certificate is awarded to Mr./Ms./Mrs./Dr. Naveen kumar T of Tiruvallur district, in recognition of his /her being chosen as the **BEST ACADEMIC HACKATHON IInd RUNNER UP AWARD** (Third Level) in the state wide competition conducted by EDII, Tamil Nadu for *higher education students. Congratulations on successfully completing the EDII's Innovation journey and demonstrating your problem solving skills through an award winning innovative idea and resulting in a product prototype.

*Engineering, Arts & Science, Agriculture, Veterinary, Fisheries, Polytechnic & ITI

Date 11-November-2024

Thiru. R. AMBALAVANAN, IAAS.,
Director - EDII-TN

Youtube: www.youtube.com/@ediitn | Facebook: EDIITamilnadu | Twitter: edichennaitn | Web: www.editn.in

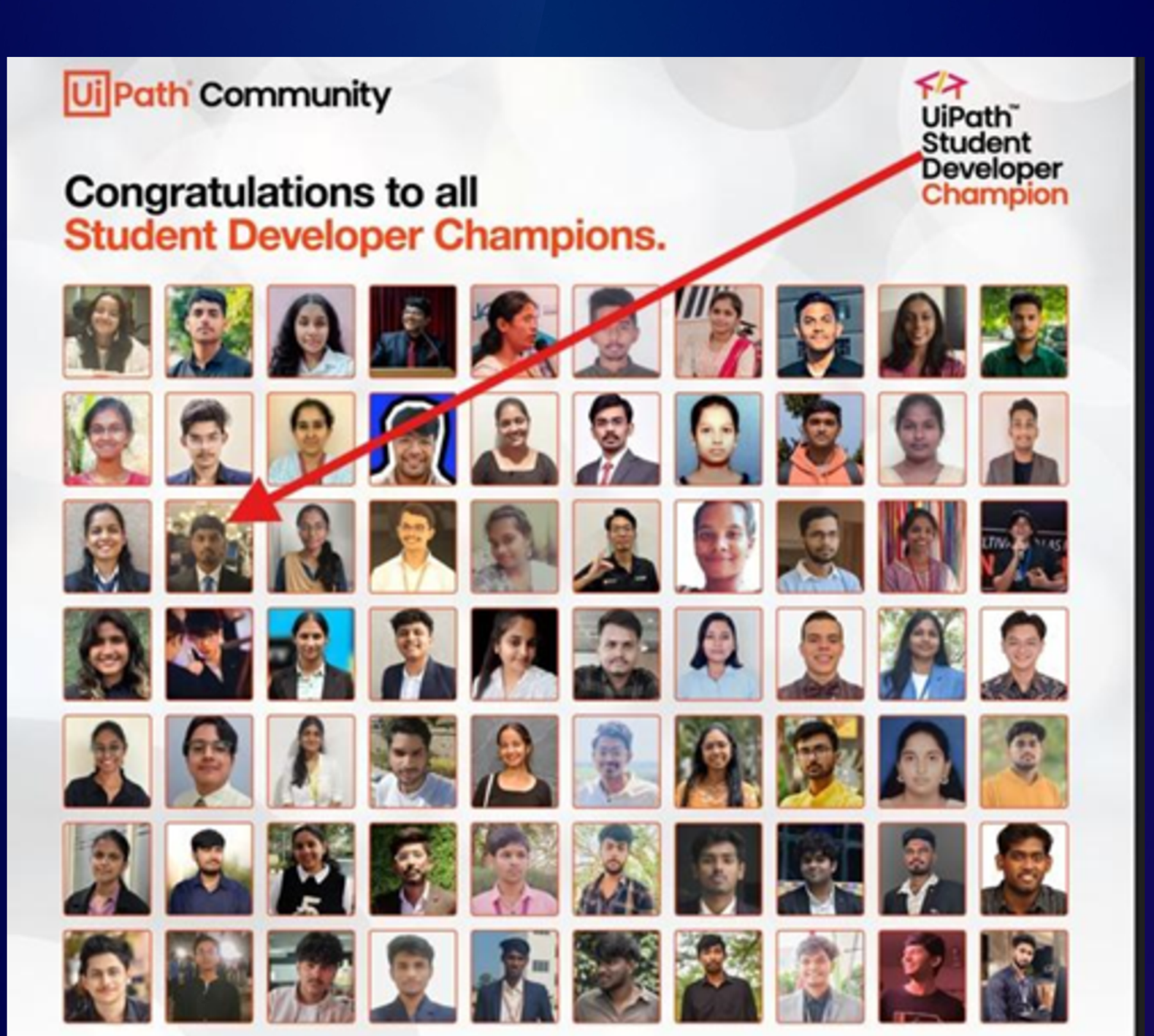
NAVEEN KUMAR T HAS BEEN AWARDED WITH THE BEST ACADEMIC HACKATHON II RUNNER UP AWARD (THIRD LEVEL) IN THE STATE WIDE COMPETITION CONDUCTED BY EDII, TAMIL NADU.



CHANDRA MOHIT AND TEAM FROM III CSE HAVE WON THE 1ST PRIZE IN PAPER PRESENTATION AND PROJECT PRESENTATION @ JEPPIAR ENGINEERING COLLEGE ON 03/04/2025



KABIL PREETHAM K, HARIHARAN B, GOWTHAM K, KATHIRESWAR T WERE THE WINNERS OF NEXATHON CONDUCTED AT KCG COLLEGE OF ENGINEERING.



BHARATH V HAS BEEN SELECTED AS CHAMPION IN UIPATH STUDENT DEVELOPER CHAMPION ON 24/3/2025.





OUR IV YR STUDENTS LITHIKA AND SUMITHA K WON THE 2ND (RS.50,000) AND 3RD PLACE (RS.30,000) IN THE SHECODES CONTEST HELD AT PANIMALAR ENGINEERING COLLEGE .



JANANI J AND MALATHI B OF III YEAR HAVE BEEN AWARDED BEST PERFORMER AWARD ORGANISED BY PANIMALAR ENGINEERING COLLEGE IEEE STUDENT BRANCH.

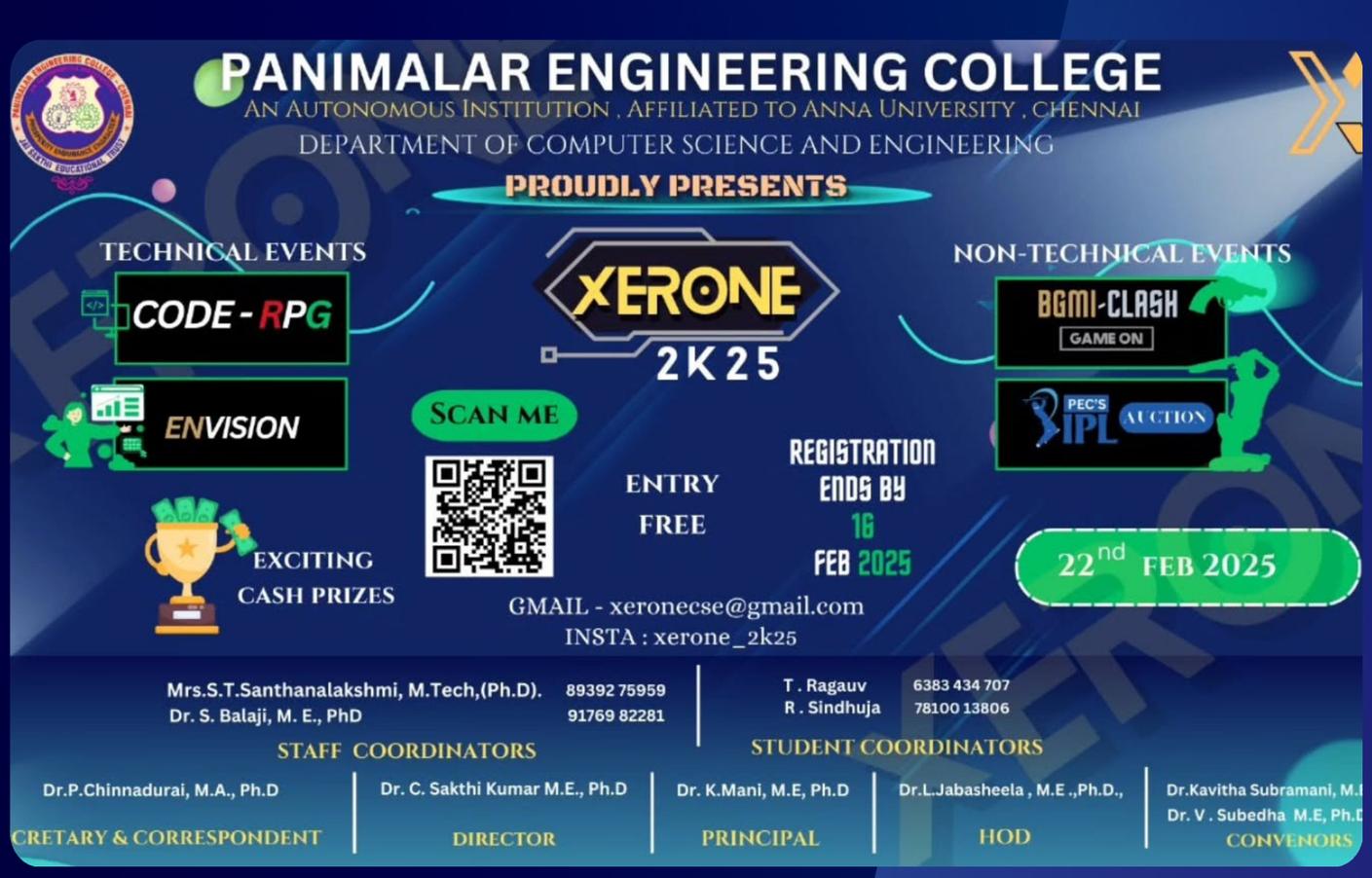
EVENTS



SAIHARSHITH K S, SANJAY BALAJI K, SANJAY S OF II YEAR WON THE PROJECT COMPETITION IN PEC TEAM 2025 ON 22/3/2025.

INTER-COLLEGE SYMPOSIUM 2025 ("INNOVATE, INSPIRE, IMPACT") PANIMALAR ENGINEERING COLLEGE HELD ON 22-02-2025





XERONE 2025 — A NATIONAL LEVEL TECHNICAL SYMPOSIUM PRESENTED BY THE DEPARTMENT OF CSE HELD ON 22ND FEB 2025



✨ CELEBRATING WOMEN CELEBRATING STRENGTH! ✨ A MOMENTOUS CELEBRATION IN PANIMALAR ENGINEERING COLLEGE CAMPUS ON 7TH MARCH 2025.



EVENTO DE TECHNOLOGIA'25 A TECHNICAL FEST EVENT AT THE DEPARTMENT OF CSE, HELD ON 21-02-2025.



8th INTERNATIONAL CONFERENCE – TIME TO PUBLISH YOUR PAPERS, DEPARTMENT OF CSE, PANIMALAR ENGINEERING COLLEGE HELD ON MARCH 21st & 22nd

STUDENT ARTICLES

🎯 the future called — it wants you to code faster!

Brain-Computer Interfaces – The Future of Mind-Controlled Devices

Imagine controlling your phone, computer, or even a robotic arm just by thinking — this is the power of Brain-Computer Interfaces (BCIs). BCIs are advanced systems that connect the human brain directly to external devices, enabling communication without physical movement.

BCIs work by detecting brain signals using sensors placed on the scalp or implanted inside the brain. These signals are then translated into digital commands, allowing users to control devices with their thoughts. While BCIs were once limited to medical uses, such as helping paralyzed individuals regain movement, they are now expanding into gaming, smart home control, and even mental health monitoring.

Companies like Neura-link and Open BCI are rapidly advancing this technology, raising exciting possibilities — from improving productivity to enhancing human cognition. Though challenges remain, such as ensuring safety and data privacy, BCIs are set to reshape how we interact with the world, making mind-controlled devices a reality sooner than we think.

By: LALITHAMBIKA, II - C

"EVERY PROBLEM HAS A TECH SOLUTION – IF YOU'RE BRAVE ENOUGH TO BUILD IT."

🎤 Tech Gossip Column: The Drama of AI Takeover

Hold onto your laptops, folks! The AI drama of 2025 is hotter than your favorite reality show. Here’s what went down last week:

Google’s Gemini officially beat humans at creating algorithms for real-time language translation. The plot twist? The AI did it without needing a single human-in-the-loop! It’s now rolling out as part of Google Translate updates — sorry, linguists!

Meanwhile, Apple’s new Siri update dropped some serious truth bombs. After years of being the clumsy, “just ok” assistant, Siri now writes full-length, personalized emails — and guess what? It’s nailing tone, subject matter, and even emojis. Looks like Apple’s Siri might be getting an AI raise soon!

Oh, and we can’t forget about DeepMind's quantum-powered AI. This one’s a secretive project that might just be the first real breakthrough in AI ethics. DeepMind claims it has built a quantum computer capable of real-time moral decision-making in AI applications. Talk about a plot twist! Could AI ethics be the next frontier?

By: KEERTHIVAASAN . N (II-J)

💥"Brain Meets Machine: 2025 Edition!"

🎮 The Rise of Procedural Generation in Video Games

Have you ever wondered how open-world video games, like Minecraft or No Man’s Sky, create vast, ever-expanding worlds? The answer lies in procedural generation — a method of content creation that uses algorithms to generate data automatically. Instead of manually designing every feature of the world, procedural generation allows for endless variation, with infinite combinations of landscapes, cities, and ecosystems created on the fly.

This technique is not just limited to video games. It’s being used in areas like:

Simulations (weather patterns, urban planning)

Music Composition (generating melodies and harmonies based on rules)

AI (creating virtual environments and training autonomous systems)

Hence this procedural generation opens the door to a creative blend of mathematics, algorithms, and design, offering endless possibilities in both gaming and real-world applications.

By: MIRUDHULA. A (III B)

"TECH WITH A PURPOSE.

TECH WITH A PULSE."

Edge Computing: A Smarter Way to Process Data

In a world dominated by connected devices, Edge Computing is emerging as a game-changer. Rather than sending massive amounts of data to distant cloud servers, Edge Computing processes data closer to where it’s generated — at the “edge” of the network, on local devices like smartphones, cameras, or sensors.

This localized data processing offers several key benefits:

- Reduced Latency: Data is processed in real-time, making applications like self-driving cars and industrial automation more efficient.
- Bandwidth Efficiency: By only sending relevant data to the cloud, edge computing reduces the load on networks and saves bandwidth.
- Enhanced Security: Sensitive data is processed locally, reducing the risks of data breaches.
- Reliability: Edge devices continue to function even in environments with intermittent or no network connectivity.

From autonomous vehicles to smart cities and wearable health devices, edge computing is revolutionizing industries by enabling faster, more secure, and more efficient data processing. As the Internet of Things (IoT) continues to grow, edge computing will play a crucial role in shaping the future of technology.

By: HARISH. R (III H)

"SECURE, SUSTAIN, SCALE — THE NEW TECH MANTRA."

Tech for Sustainability: How Students Can Contribute to the SDGs

The United Nations' Sustainable Development Goals (SDGs) are a blueprint for addressing global challenges, from poverty and inequality to climate change and environmental sustainability. As students, we can play an active role in achieving these goals through innovation and technology.

For instance, SDG 4 (Quality Education) is being advanced through EdTech, enabling access to education worldwide. SDG 7 (Affordable and Clean Energy) sees students developing new green technologies, like solar and wind power, to create a sustainable energy future. SDG 9 (Industry, Innovation, and Infrastructure) encourages the use of tech to build smart cities and sustainable infrastructure.

AI is also a key player in SDG 13 (Climate Action), helping track climate patterns and reduce emissions. Moreover, SDG 12 (Responsible Consumption and Production) focuses on the circular economy, with students innovating solutions to reduce waste and promote recycling.

By using our skills in tech and innovation, we can contribute directly to these global goals. The future is in our hands, and with the right tools, we can make a lasting impact on the world.

By: SINDUJA. R (IV B)

⚡ "Tech Pulse: Powering the Digital Tomorrow."

🖼️ The Ghibli Art Trend of 2025: AI Meets Animation

In 2025, a viral trend emerged where people used AI tools to create images in the style of Studio Ghibli films. This phenomenon, known as the "Ghibli art trend," saw users generating portraits, memes, and reinterpretations of historical events with a whimsical, anime-inspired aesthetic. While the trend gained popularity, it also sparked debates about the ethics of AI-generated art, copyright issues, and the future of animation.

By: JAYAPRAKASH. S (IV D)