PANIMALAR ENGINEERING COLLEGE

(An Autonomous Institution, Affiliated to anna University)
Bangalore Trunk Road, Varadharajapuram, Poonamallee, Chennai – 600 123.

DEPARTMENT OF INFORMATION TECHNOLOGY

TECHNOSPHILLA '25

DEPARTMENT MAGAZINE

2024-2025

TECHNOSPHILLA

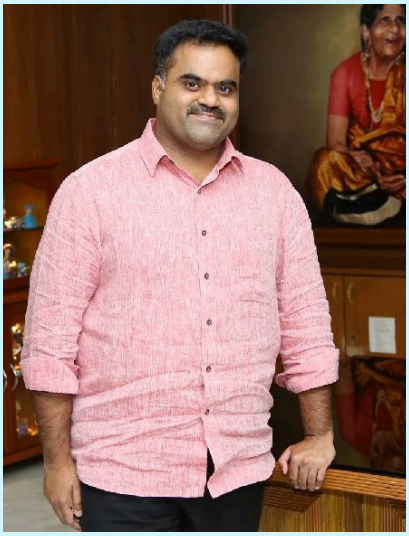
2025

THE GREAT GROWLING ENGINE OF CHANGE – TECHNOLOGY.

MESSAGE FROM THE MANAGEMENT

My heartfelt appreciation goes to everyone who contributed to Technosphilla '25, iT department magazine, which highlights remarkable advancements across various fields.
This publication reflects the true potential, creativity, and commitment of both our students and faculty. It stands as a testament to our collective vision and serves as a platform that propels the department toward future achievements.
I extend my best wishes for continued success and growth in all future endeavors.

Dr.P.Chinnadurai, M.A., M.Phil, Ph.D
Secretary & Correspondent,
Panimalar Group of Institutions



The lonely fantasies of the past in the era of computers have woven into a stunning panorama of reality in the present.

The issue of the magazine Technosphilla '25, offers loving assistance so they can leave feeling satisfied, fulfilled, and at the pinnacle of perfection. I want them to have the capacity to learn everything there is to know about computers.

Dr. C. Sakthi Kumar M.E, Ph.D
Director,
Panimalar Group of Institutions

As we continue to stride forward with unwavering dedication to nurturing holistic growth in every student, it gives me immense pride and joy to address you through the pages of our esteemed college magazine.
This publication stands as a vibrant reflection of the talent, imagination, and hard work that flourish within our campus community. At our college, we have always believed education is not confined to textbooks and classrooms; it is about shaping confident, creative, and compassionate individuals ready to make meaningful contributions to the world.
I encourage each one of you to explore this magazine with an open heart—admire the creativity, appreciate the voices expressed, and celebrate the collective achievements of our students. May the passion and dedication showcased within these pages inspire you to pursue your own dreams with courage and conviction.

Dr. Saranya Sree Sakthi Kumar B.E, M.B.A, Ph.D.
Director,
Panimalar Group of Institutions

I am delighted to present the Information Technology Department magazine of Panimalar Engineering College. I am confident that you will enjoy reading it, as it offers an insightful glimpse into the dynamic activities and accomplishments of this vibrant department.
May this magazine, and the many editions that follow, continue to keep us informed and inspired by the department's progress in the years ahead.
My wholehearted congratulations to the Head of the Department, the faculty members, and the students for their commendable effort and exceptional initiative in bringing this publication to life.

Dr. K.Mani, M.E, Ph.D
Principal,
Panimalar Engineering College

EDITORS NOTE

Dear Readers,

It brings us great pleasure to publish this magazine on behalf of Panimalar Engineering College's Department of Information Technology. It was a pleasure to serve as this issue's editors. This magazine highlights the hidden talents of our students on various aspects and fields.
We sincerely hope that you are thrilled to understand the numerous skills made by the students of our department.
We would like to extend our sincere gratitude to Dr. M Helda Mercy, our department head, for her assistance, support, and direction in the development of this magazine.

Chief Editor:	Dr. M HELDA MERCY, PROF & HEAD / IT DEPARTMENT
Faculty Editor:	Dr. S. SHARANYAA / AP
Student Editors:	Ms. PRIYA KUMARI Ms.LIBEYA MARY Ms.JECINTH KENNY Mr. SAI KUMAR

VISION & MISSION

Vision of the Department

To impart fundamental knowledge and practical expertise in Information Technology to students, instilling ethical principles to achieve excellence in academics and corporate to emerge as distinguished graduates.

Mission of the Department

M1: To establish a strong foundation in technology through innovation and research.

M2: To create a tech-driven learning environment that promotes academic success.

M3: To develop skilled graduates in IT, research, and entrepreneurship with global competence.

M4: To collaborate with industry and government affairs to gain exposure while maintaining standards and promoting ethics, diversity, and social impact.

PEO'S

PEO1: Technical Competence and Problem-Solving: To provide graduates with a robust foundation in engineering and mathematics, enabling them to design and enhance cutting-edge technology systems.

PEO2: Technological Expertise: To collaborate with industry and government affairs to gain exposure while maintaining standards and promoting ethics, diversity, and social impact.

PEO3: Industry and Research Collaboration: To encourage collaboration with industries, universities, and research centers to drive innovation and create impactful solutions.

Research

Gazette

GEOSPATIAL AI: REVOLUTIONIZING ENVIRONMENTAL MONITORING

Recent advancements in Artificial Intelligence (AI) combined with satellite imagery and Geographic Information Systems (GIS) are enabling real-time environmental monitoring at an unprecedented scale. Researchers are using machine learning algorithms to analyze vast datasets from satellites, drones, and ground sensors to detect deforestation, illegal mining, urban sprawl, and natural disasters.
For example, AI models can now identify illegal logging in the Amazon rainforest by comparing satellite images over time and flagging suspicious changes. This helps governments and NGOs intervene faster, preserving ecosystems.

Similarly, predictive models can forecast wildfires based on weather, vegetation dryness, and human activity, allowing early warnings for at-risk regions.

This fusion of AI and geospatial tech is also being used to track climate change impacts, like glacier retreat and sea-level rise, providing crucial data for policy and disaster management worldwide.

SABARIKA SHREE A
2021PECIT174

5G AND EDGE COMPUTING TRANSFORMING REMOTE HEALTHCARE

In many rural and geographically isolated areas, healthcare delivery faces challenges due to limited infrastructure. The rollout of 5G networks combined with edge computing is transforming telemedicine and remote diagnostics.

With 5G's low latency and high bandwidth, medical devices in remote clinics can transmit high-resolution imaging (like MRI or ultrasound) to specialists in urban centers instantly. Edge computing enables data processing near the source, reducing dependency on distant cloud servers and improving response times.

This technology allows real-time monitoring of chronic conditions, remote surgeries assisted by robotics, and AI-driven diagnostics powered by local data. Countries with difficult terrains—mountainous regions or islands—are increasingly adopting these solutions to overcome geographic barriers and improve health outcomes

PRATHISH R
2023PECIT380

DIGITAL TWIN TECHNOLOGY

Digital Twin Technology is a revolutionary concept that creates a virtual replica of a physical object, process, or system. It allows engineers to visualize, monitor, and analyze real-world performance in a digital space. By collecting real-time data from sensors, the digital twin continuously updates to reflect the current state of the physical asset. This enables accurate predictions of failures, reducing downtime and maintenance costs. Industries such as aerospace, healthcare, automotive, and smart manufacturing are rapidly adopting digital twins to improve efficiency.

The technology supports better decision-making by allowing simulations and testing before real-world implementation. It enhances product design, increases reliability, and reduces operational risks. Digital twins also play a crucial role in building smart cities and optimizing energy consumption. As IoT, AI, and data analytics continue to evolve, Digital Twin Technology is becoming the backbone of Industry 4.0. It represents the future of intelligent engineering, transforming imagination into measurable innovation.

VIJAY ARAVIND S
2023PECIT350

WEARABLE TECHNOLOGY INNOVATIONS

Earable technology refers to wearable devices designed to be worn in or around the ear, such as earbuds, hearing aids, and smart earpieces. Over recent years, these devices have evolved far beyond their original function of audio playback or hearing assistance. Researchers are now exploring earables as multifunctional platforms capable of seamless human-computer interaction, environmental sensing, and continuous health monitoring. This shift is driven by advances in miniaturized sensors, wireless communication, and artificial intelligence, making earables a promising frontier in wearable technology.

One key innovation in earable tech is the integration of biosensors that can measure physiological signals such as heart rate, body temperature, oxygen saturation, and even brain activity through electroencephalography (EEG).

This enables real-time health monitoring in daily life, supporting early detection of medical conditions, stress management, and personalized wellness programs. Furthermore, earables can provide contextual awareness by detecting environmental sounds and user activities, facilitating smart assistants that respond dynamically to surroundings and user needs. The research landscape around earables is rapidly expanding, with numerous studies focusing on improving device comfort, battery life, data accuracy, and privacy concerns. Applications range from enhancing communication for individuals with hearing impairments to immersive augmented reality experiences and hands-free control of smart devices. As earables become more sophisticated, they hold the potential to transform how people interact with technology, health systems, and the environment, making them a vibrant area of scientific and technological innovation.

KAARTHIGA G
2022PECIT165

AI-DRIVEN PREDICTIVE MAINTENANCE

Artificial Intelligence (AI) has become a powerful tool in accelerating scientific discovery by analyzing vast datasets, identifying hidden patterns, and generating new hypotheses that would take humans years to uncover. Traditional research methods often involve time-consuming experiments and trial-and-error approaches, but AI enables researchers to process massive amounts of data efficiently, reducing both time and cost. From drug discovery to climate modeling, AI is helping scientists make predictions and design solutions that were previously out of reach.

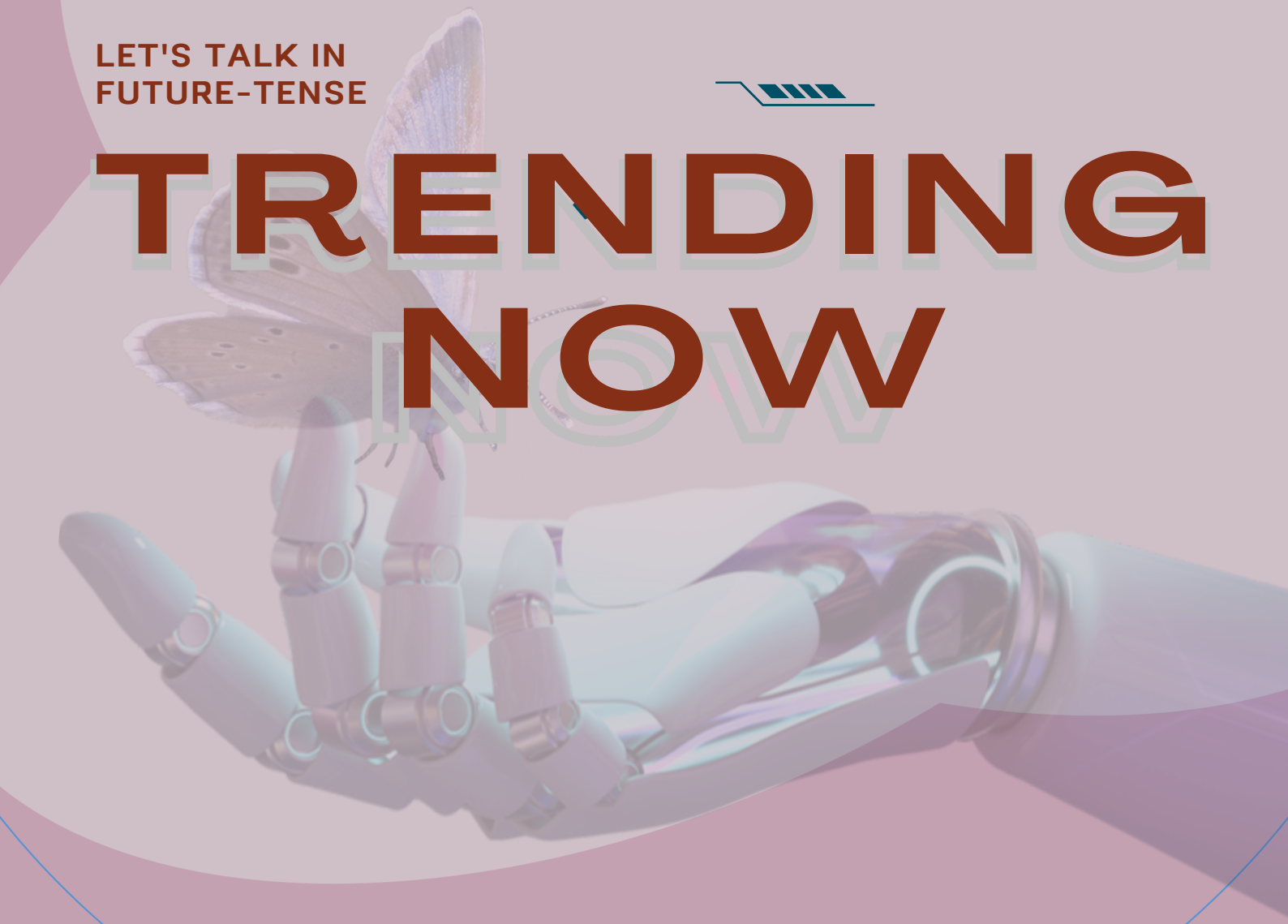
One of the most notable impacts of AI is in the field of healthcare and drug development. Machine learning algorithms can scan through millions of chemical compounds to predict which ones are most likely to interact with a specific biological target, drastically shortening the drug development cycle. Similarly, AI-driven protein structure prediction, such as DeepMind's AlphaFold, has revolutionized biology by solving one of the biggest challenges in understanding life at the molecular level. These breakthroughs open the door to more effective treatments and personalized medicine.

Beyond biology, AI is advancing discoveries in physics, astronomy, and environmental science. For example, AI models are used to analyze telescope data to detect new exoplanets, simulate particle physics experiments, and predict natural disasters with greater accuracy. By complementing human intuition with machine precision, AI not only speeds up research but also expands the scope of what scientists can explore. In the future, AI-driven discovery is expected to play a central role in solving global challenges such as sustainable energy, food security, and climate change.

NAVEEN RENGANATHAN R S
2023PECIT358

LET'S TALK IN
FUTURE-TENSE

TRENDING NOW



TECHNOSPHILLA '25

Current Trends in Technology

1. AI Assistants' Responses to High-Risk Self-Harm Queries

A new study published on September 2,2024 finds that ChatGPT, Gemini, and Claude often respond directly to high-risk suicide-related questions—sometimes even offering methods.

2. Eco-Friendly Solar Farming: Sheep as Lawn Mowers

Solar farms are adopting sheep to graze beneath panels instead of using mechanical mowers. This method cuts maintenance costs, lowers emissions, and offers additional income opportunities for farmers—making it a win-win for green energy and agriculture.

3. Mobile Science Expo on Wheels in Tamil Nadu

The Periyar Science and Technology Centre in Tamil Nadu is launching a "Mobile Science Exhibition Bus." It will travel to schools and colleges, bringing hands-on science exhibits and tech demonstrations to students across the region.

4. Scientists Discover Novel Cancer-Prevention Method

A new discovery, reported September 2, presents a "powerful new way to prevent cancer" that involves stimulating healthy cell function alongside targeting unhealthy ones, offering a dual-action approach to disease prevention.

5. Abu Dhabi Conference Tackles Water Scarcity with Innovation

The Fifth Annual Sustainable Water Security Conference opened in Abu Dhabi, focusing on using technology and youth-led initiatives to address global water challenges. It brings together policymakers, scientists, and innovators to shape the future of water security.

6. Zoom Wins an Emmy for Broadcast Innovation

Zoom's "Zoom for Broadcast" technology received an Engineering, Science & Technology Emmy Award, credited for enabling high-quality remote video and audio contributions into live broadcasts—democratizing access for major broadcasters and creators alike.

7. Engineering Science Emmys Celebrate Tech Innovation

The Television Academy has announced winners for the 2025 Engineering, Science & Technology Emmys. Among the honorees: BBC Research and Development and LucidLink, recognized for groundbreaking contributions that push the boundaries of broadcast and tech.

8. Subscribe to the Hottest AI Newsletters of 2025

A new ranking highlights the top 10 AI newsletters—including Superhuman AI, The Neuron, and The Rundown AI—as the best sources for staying updated on AI tools, trends, and breakthroughs, many available for free to readers.

9. Fortifying Fundamental Biology: Kidney-Saving microRNA

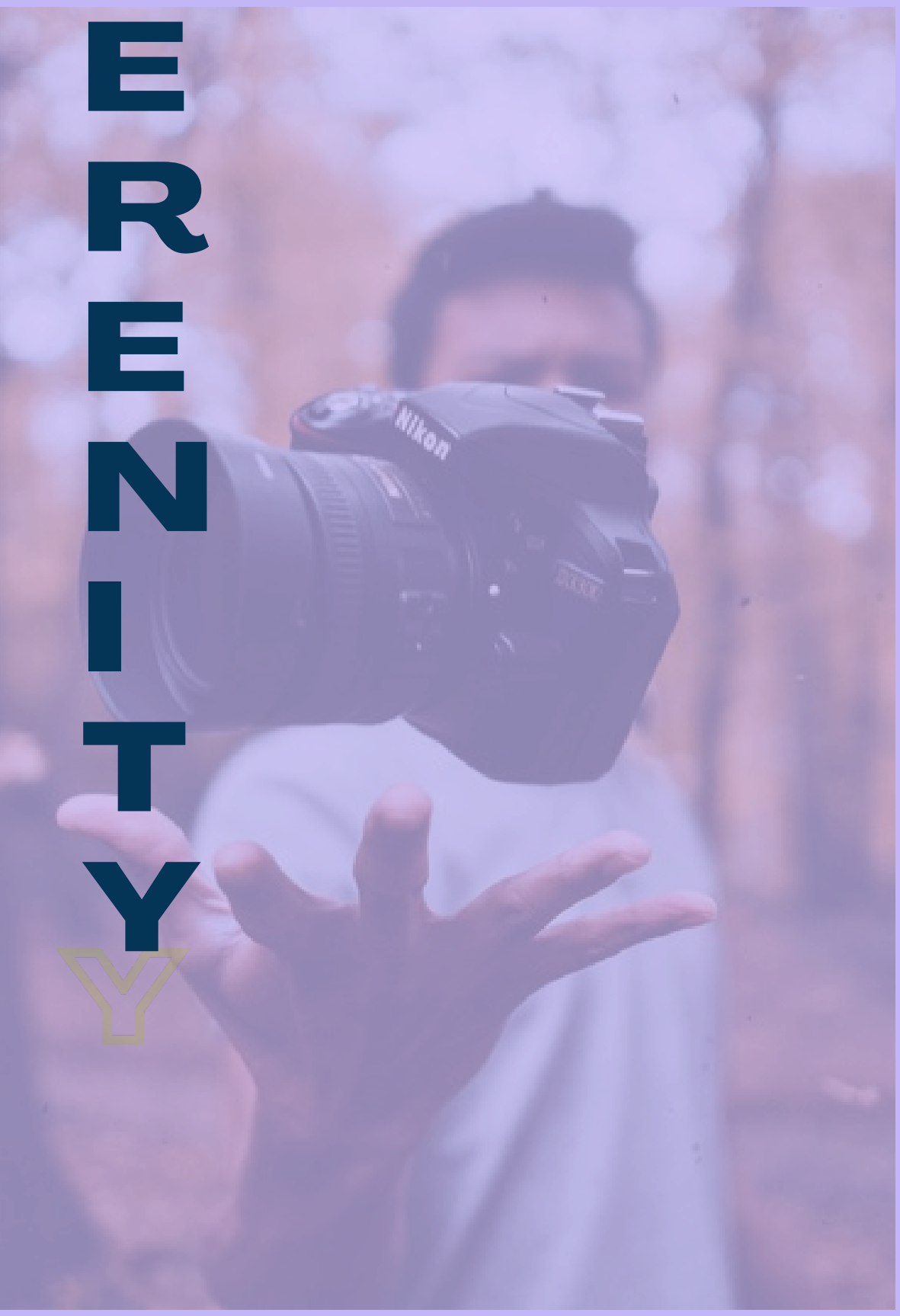
Researchers have identified a microRNA that helps preserve kidney function—marking a world-first discovery with potential for early detection and prevention of kidney disease.

10. AI-Powered Brain Device Controls Robotic Arm

Nature reports that a paralyzed man successfully controlled a robotic arm via an AI-enabled brain-computer interface. This social-machine collaboration paves the way for transformative assistive technologies.

KRUTHIKA V
2022PECIT173

SHUTTERED SERENITY



TECHNOSPHILLA ’25

MADHUMITHA
B2022PECIT181

SAM PRAKASH S
2022PECIT304

DEVA DHARSHINI S
2024PECIT134

Creatives of 1st Year IT Studnets

POETRY

When I rest in my mother's lap,
The whole world fades into calm.
Her hands are like a temple divine,
Where love itself takes form and shine.
Even as years may pass and go,
Her care follows me like a shadow.
Her smile is the music of my heart,
Her tears, the echo when I depart.
A single word from her lips so kind,
Holds blessings for my heart and mind.
Her lap is my earth and sky,
Her love — the breath that will never die. 💖

ELAKKIYA M
2022PECIT137

சிறு உதவி நெஞ்சில் மகிழ்ச்சி தரும்,
அன்பின் ஒரு வார்த்தை உலகம் மாற்றும்.
நம் செயல்களில் ஒளி பரப்புவோம்,
மனிதம் மலர வாழ்வில் அமர்த்துவோம்.

DHANALAKSHMI R
2022PECIT126

அறிவின் ஒளி

அறிவின் தீபம் ஏந்தி நடக்கும் பாதை நம்மது,
அயராது தேடும் மனம் – அதுவே செல்வம் நம்மது.
ஆசிரியர் வார்த்தை விதை, மாணவர் நெஞ்சில் முளைக்கும்,
அது மலர்ந்தால் உலகம் முழுதும் ஒளிரும் உண்மை விளக்கும்.
கற்றல் என்பது கடல் – கடக்க நினைத்தால் துணிவு,
படித்தது போதும் எனாது, புதிது தேடும் மனம் நிமிர்வு.
கல்வி கொடுக்கும் ஒளியால் வாழ்வின் எல்லை விரியும்,
அறிவின் ஜொலியில் நம் கனவுகள் நனவாகும்

DR.M.SUMITHRA
PROFESSOR/IT

"Dream big, start small, act now

Teachers are the backbone of any country, the pillar upon which all aspirations are converted into realities.

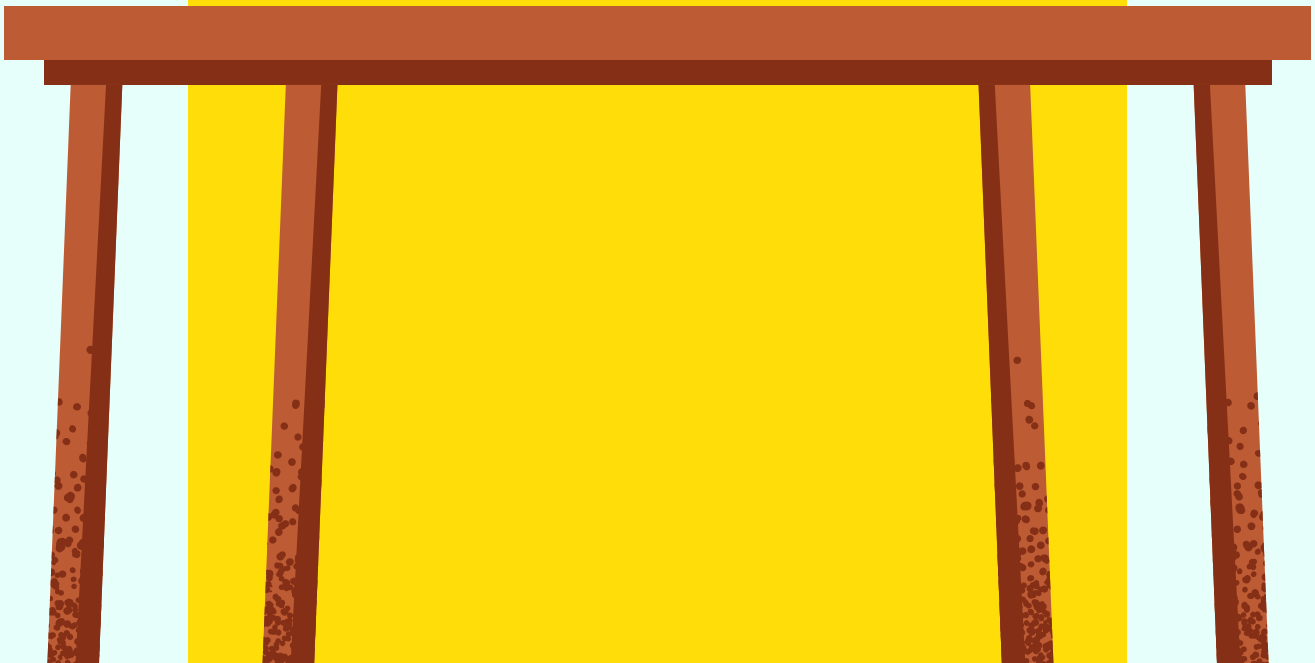
Dr. A.P.J. Abdul Kalam

TECHNOSPHILLA '25

WE ARE

HIRING

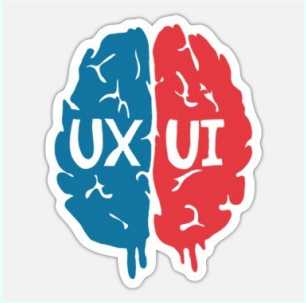
2025



UX/UI Designer

Skills Required:

UX/UI Designer: Proficiency in design tools.
User research methodologies
Wire-framing, prototyping
Front-end development, usability principles.



Quality Assurance (QA) Tester

Skills Required:

Attention to detail, understanding of software testing methodologies, familiarity with automated testing tools.

Database Administrator

Skills Required:

SQL, understanding of database management systems (MySQL, PostgreSQL, Oracle), data modeling

Digital Transformation Manager

Skills Required:

Project management expertise
Emerging technologies, strategic planning
Stakeholder management
Organizational change and innovation.

BUSINESS INTELLIGENCE ANALYST

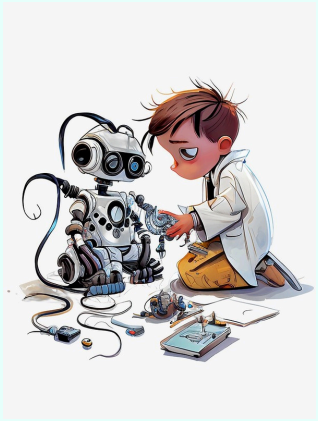
Skills Required:

- Data analysis and visualization tools
- SQL and database querying skills
- Data warehousing concepts

WEB DEVELOPER

Skills Required:

HTML, CSS, JavaScript, responsive design, familiarity with frameworks like React or Angular.



DATA ANALYST

Skills Required:

Excel, SQL, basic knowledge of Python or R, data visualization tools (Tableau, Power BI).

CLOUD SOLUTIONS ENGINEER

Skills Required:

Understanding of cloud computing concepts, familiarity with services like AWS or Azure, basic networking knowledge.

Certifications (Optional but Beneficial)

- CompTIA A+/Network+ for technical support roles.
- AWS Certified Cloud Practitioner for cloud roles.
- Certified Ethical Hacker (CEH) for cybersecurity positions.
- Oracle Certified Associate (OCA) for database roles.

JAYAGANESH G

Tips for Freshers from Seniors

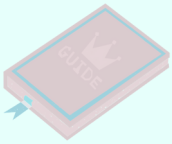
- Stay curious—never hesitate to ask questions or seek help when needed.
- Manage your time well and avoid last-minute studying; consistency is the key.
- Actively participate in workshops, club activities, and events to build confidence and skills.
- Keep upgrading your technical and soft skills beyond the syllabus.
- Maintain a healthy balance between academics, extracurriculars, and personal life.
- Communicate respectfully with faculty and peers—college networking begins here.
- Make use of opportunities like internships, projects, and certifications early.
- Stay disciplined and organized; plan your tasks and set short-term goals.
- Don't fear mistakes—treat them as learning experiences, not setbacks.
- Believe in yourself, stay positive, and enjoy every moment of this journey.

ABINAYA
2022PECIT101

Tips to Students – For Placements in Top IT Companies

- Strengthen Your Basics – Be confident with fundamentals of programming (C / Java / Python), data structures, and problem-solving.
- Practice Aptitude Daily – These companies focus heavily on quantitative aptitude, logical reasoning, and verbal ability during initial screening.
- Learn One Programming Language Well – Master at least one language rather than knowing many superficially. Competitive platforms like Hackerrank, LeetCode, and CodeChef help a lot.
- Focus on Communication Skills – Clear communication matters as much as technical knowledge; practice speaking fluently and confidently.
- Build a Simple Portfolio/Resume – Highlight projects, internships, certifications, and achievements; keep the resume clean and honest.
- Work on Mini Projects – Hands-on experience is valued; build small and meaningful projects that demonstrate problem-solving.
- Be Familiar With SDLC and Basics of DBMS, OS, and Networking – Most interview questions revolve around these core concepts.
- Practice Mock Interviews – Simulate interview environments with friends or mentors to reduce nervousness and improve clarity.
- Stay Updated on Corporate Etiquette and Professionalism – Companies look for teamwork, adaptability, positive attitude, and willingness to learn.
- Show Enthusiasm and Confidence – Even if you don't know an answer, be calm, think logically, and show your eagerness to learn.

RAMANESH S
2022PECIT292



PLACEMENT GUIDELINES

To the creative minds and enthusiastic learners of Panimalar, I would like to share a few things that helped me grow through the next phase, The Placements!

- Familiarize yourself with the placement process at your institution, including timelines, procedures, and required documents.
- Keep your resume clear and concise. Include sections such as Education, Skills, Projects, Internships, and Extracurricular Activities.
- Participate in mock interviews organized by the placement cell or student clubs to gain confidence.
- Prepare for frequently asked questions like "Tell me about yourself," "Strengths and weaknesses," and situational questions.
- Revise core subjects related to your field. Focus on important concepts and problem-solving techniques.
- Engage in projects, internships, or workshops to gain practical knowledge and hands-on experience.
- Participate in group activities to enhance collaboration and teamwork skills.
- Arrive on time for interviews and placement tests.
- Keep up with the latest trends and developments in your field to demonstrate your interest during interviews.
- Consider enrolling in online courses to enhance skills that are in high demand in your field.
- Research companies that are recruiting, including their culture, values, and recent developments
- Utilize the resources offered by college's placement cell for workshops and guidance.

To all Panimalarites, I wish you the best of luck in your placement journey. Remember to stay focused, keep learning, and approach challenges with a positive attitude. With determination and the right skill set, you can achieve great success. Preparation is key to success in the placement process. Start early, stay organized, and maintain a positive attitude. Good luck!

Ms.Dymphna Mary
2023 Batch

SUDOKU

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	4				6			
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	7					8		6
6								5
2		8					1	
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7	2		3	8		5		
5		2	6				4	1
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	6	7						3

PUZZLE

Tech Crossword

Across

Google's mobile OS (6)
Short video platform ___Tok (3)
Computer's brain, abbr. (3)
Website access credential (8)
Local wireless network (4)
Text-based instruction file (6)

Down

Code repository site (7)
Encrypt's opposite (7)
AI model outputs are called ___ (7)
Temporary storage (5)
Startup's first public release (4)
File sent with an email (10)

Science Crossword (12 clues)

Across

Smallest unit of life (4)
Earth's natural satellite (4)
Liquid to gas transition (9)
Table of the elements, "___ Table" (9)
Study of living things (7)
Force that pulls us down (7)

Down

Water's chemical formula (3)
Red planet (4)
Speed + direction (8)
Energy unit (4)
An organism's hereditary code (3)
Layers of rock (7)

General Knowledge Crossword

Across

Capital of Japan (5)
Shakespeare's "___ and Juliet" (4)
Opposite of "rare" for steak (4)
Currency of the EU (4)
Continent with the Nile (6)
He paints the "Mona Lisa" (7)

Down

Largest ocean (7)
Author of "Harry Potter" (6)
Country of the Taj Mahal (5)
Sport played at Wimbledon (6)
Device to take photographs (5)
Musical group of four (7)
Metal that's liquid at room temp (7), chem. symbol Hg

NAWFAL MOIDEEN M R
2023PECIT361

Journey of a Panimalarite

ALUMNI CORNER

ALUMNI TESTIMONIALS

Studying at Panimalar Engineering College has been one of the most transformative experiences of my life. The curriculum was structured to create a balance between academic excellence and real-world exposure. The continuous guidance from faculty members helped me strengthen my fundamentals, while the hands-on labs and projects encouraged me to apply concepts practically. I was always motivated to think differently and push myself beyond my comfort zone.

The placement training, aptitude classes, and mock interviews conducted by the Training & Placement Cell were crucial in helping me secure my position at CTS. The discipline, values, and work ethic that Panimalar instilled in me continue to guide me in my professional career. I am proud to be an alumnus of this institution, and I owe much of my success to the strong foundation built here.

ARCHANA K

My College has always stood out for its structured environment and student-centered approach. The faculty members were more than educators—they were mentors who patiently guided us with both academics and personal development. The college provided excellent technical resources, workshops, seminars, and industry interactions that shaped us into competent professionals.

The culture of discipline and consistent learning prepared me for corporate expectations even before stepping into the industry. The exposure I received during internships, technical symposiums, and project presentations made me confident and interview-ready. Looking back, I feel grateful for the opportunities and encouragement Panimalar provided at every step of my journey.

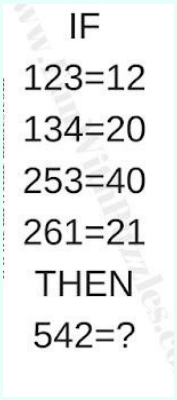
AISHWARYA S

My four years at Panimalar Engineering College were nothing short of remarkable. The environment fostered learning, innovation, and personal growth. I particularly appreciated the emphasis on practical knowledge—be it through labs, coding contests, or departmental activities. The faculty pushed us to explore new technologies and supported us during every project and presentation.

The placement training program significantly improved my confidence, communication, and technical skills. The mock interview sessions, group discussions, and aptitude training were extremely valuable. Panimalar shaped not just my career but also my attitude, discipline, and professionalism. I proudly carry the values I learned here into every step of my professional journey.

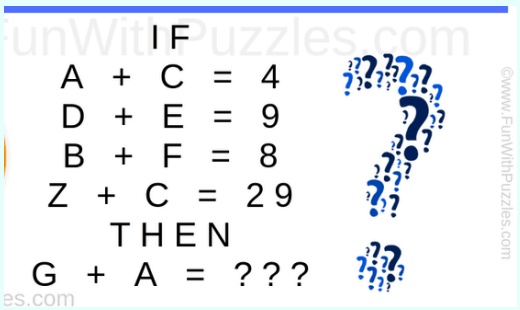
VAMSHIKRISHNAN S

SOLUTIONS



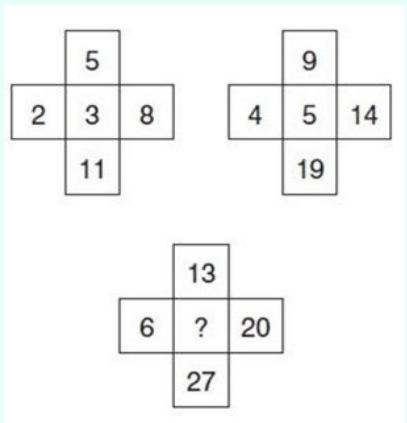
The answer is 51

Multiply all the numbers on the left and then add each of the digits to the multiplication to get the number on the right side of the equation.



The answer is 8

Mark A=1, B=2, C=3 and so one till Z=26
So G+A=7+1=8



The answer is 7

The numbers round the center **increase by seven**(in the others they increase by three and five respectively)

SOLUTIONS

Tech Crossword

Across: 1 ANDROID, 4 TIK, 6 CPU, 7 PASSWORD, 9 WIFI, 10 SCRIPT
Down: 1 GITHUB, 2 DECRYPT, 3 RESPONSES, 5 CACHE, 8 BETA, 11 ATTACHMENT

Science Crossword

Across: 1 CELL, 3 MOON, 5 EVAPORATE, 7 PERIODIC, 9 BIOLOGY, 10 GRAVITY
Down: 1 H2O, 2 MARS, 4 VELOCITY, 6 JOULE, 8 DNA, 11 STRATA

General Knowledge Crossword

Across: 1 TOKYO, 4 ROMEO, 6 WELL, 8 EURO, 9 AFRICA, 11 DA VINCI
Down: 1 PACIFIC, 2 ROWLING, 3 INDIA, 5 TENNIS, 7 CAMERA, 10 QUARTET, 12 MERCURY

Success is not final, failure is not fatal: It's the courage to continue that counts

– Winston Churchill

SOLUTIONS

SUDOKU

1	5	6	2	3	9	7	8	4
7	4	3	8	5	6	9	2	1
9	8	2	1	4	7	5	6	3
3	7	5	4	1	2	8	9	6
6	1	4	9	7	8	2	3	5
2	9	8	3	6	5	4	1	7
4	6	9	7	8	3	1	5	2
5	2	1	6	9	4	3	7	8
8	3	7	5	2	1	6	4	9

1	3	6	5	2	4	7	9	8
8	9	5	3	6	7	1	2	4
7	2	4	9	8	1	3	5	6
5	8	3	6	4	9	2	7	1
2	6	1	8	7	3	9	4	5
4	7	9	1	5	2	6	8	3
6	4	2	7	1	8	5	3	9
9	5	7	4	3	6	8	1	2
3	1	8	2	9	5	4	6	7

2	3	4	1	5	8	6	9	7
9	5	6	4	7	3	1	8	2
1	7	8	2	6	9	4	3	5
6	4	3	9	2	5	7	1	8
8	1	5	7	4	6	3	2	9
7	2	9	3	8	1	5	6	4
5	9	2	6	3	7	8	4	1
3	8	1	5	9	4	2	7	6
4	6	7	8	1	2	9	5	3

Education is the most powerful weapon you can use to change the world

– Nelson Mandela


DEPARTMENT OF
INFORMATION TECHNOLOGY