



# PANIMALAR ENGINEERING COLLEGE

An Autonomous Institution - ( JAISAKTHI EDUCATIONAL TRUST)

Affiliated to Anna University, Chennai  
Approved by AICTE, UGC FOR 2(f) & 12(B) STATUS  
ACCREDITED BY NATIONAL BOARD OF ACCREDITATION(NBA)

## CAMPUS CONNECTOR



2023 - 2024

### DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE



IEEE



IEEE COMPUTER SOCIETY



INSTITUTION'S INNOVATION COUNCIL  
(Ministry of Education Initiative)

### ABOUT

The department of artificial intelligence and data science showcases its commitment to excellence through faculty upskilling, student achievements, impactful research, industry collaborations, and outreach initiatives aligned with emerging technologies and global sustainable development goals.

### SUSTAINABLE DEVELOPMENT GOALS





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News and Views Around

## DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

Volume 1

Issue 2

March 2024

### EDITOR'S NOTE

Dear Readers,

Warm wishes from the Department of Artificial Intelligence and Data Science, Panimalar Engineering College. This newsletter highlights key academic and co-curricular achievements of the semester. We sincerely thank Dr. S. Malathi, Head of the Department, for her continued guidance and support.

### INSTITUTE VISION

To transform the budding engineers into academically excellent, highly intellectual and self-disciplined engineering graduates to mould them as good citizens with the spirit of integrity and morality that would cater to the needs of our nation.

### INSTITUTE MISSION

- To impart quality education with high standards of excellence in engineering and technology.
- To provide an excellent infrastructure in a serene and conducive atmosphere that would motivate the students in their pursuit of knowledge in the field of engineering and technology.

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### DEPARTMENT VISION

To produce high quality creators and ethical engineers for innovative technology in the field of Artificial Intelligence and Data Science.

### DEPARTMENT MISSION

- M1:** To develop the department as a center of Artificial Intelligence for significant breakthroughs in advancing the promise of human-machine systems that can address complex cognitive tasks.
- M2:** To impart quality and value-based education and contribute towards the innovation of computing Data Science for the translation of data into information to support and improve decision making.
- M3:** To produce ethical engineers and researchers by inculcate the values of humanity and courage in producing relevant solutions to address business and societal challenges.

### PROGRAMME EDUCATIONAL OBJECTIVES(PEOs)

#### PEO 1: Mastering AI and Data Science for Human Machine Synergy

To enrich knowledge to the engineering students with cutting-edge technologies like Artificial Intelligence and Data science and enable them to develop innovative solutions to solve complex problems in various sectors and to enhance the synergy between humans and intelligent systems for optimal performance.

#### PEO 2: Fostering Interdisciplinary Research Innovation and Ethics

To engage the students in advanced research with special focus on AI and cultivate a deep knowledge of ethical frameworks that will contribute to the development of fair and accountable systems that prioritize societal well-being.

#### PEO 3: Pathways to Professional Excellence

To enable the students to secure successful careers through strong technical expertise and skill sets and drive them to pursue lifelong learning with integrity- driven mindset and become successful entrepreneurs.

### PROGRAMME SPECIFIC OUTCOMES (PSOs)

#### PSO 1 : AI Driven Innovation

Graduates should be able to evolve AI based efficient domain specific processes for effective decision making in several domains such as business and governance domains.

#### PSO 2 : Data-Driven Decision Making Insight

Graduates should be able to arrive at actionable fore sight, insight, hind sight from data for solving business and engineering problems.

#### PSO 3 : Societal Intelligence Solutions

Graduates should be able to create, select and apply the theoretical knowledge of AI and Data Analytics along with practical industrial tools and techniques to manage and solve wicked societal problems.

Stay Connected with AI & DS

**Programme Outcomes (POs)****P01: Engineering knowledge:**

Apply the knowledge of Mathematics, Science, Engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

**P02: Problem analysis:**

Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**P03: Design/development of solutions:**

Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**P0 4: Conduct investigations of complex problems:**

Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

**P0 5: Modern tool usage:**

Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

**P0 6: The engineer and society:**

Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

**P0 7: Environment and sustainability:**

Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**P0 8: Ethics:**

Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**P0 9: Individual and team work:**

Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

**P0 10: Communication:**

Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

**P011: Project management and finance:**

Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

**P012: Life-long learning:**

Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

**EDITORIAL BOARD****Chief Editor:****Dr. S. MALATHI****Faculty Editor:****Mrs.S. SRINIDHI****Student Representatives:****P. Dinesh II AI&DS-C, V. Manikandan II AI&DS-C**

## Achievements/Recognitions

### Faculty interaction



Dr. S. Malathi, Professor and Head of the AI & DS department, served as the Session Chair at the International Conference on Advanced Innovative Research in Engineering.

Dr. S. Hemamalini, Associate Professor in the AI & DS department, acted as a judge for a National-level Technical Project Competition held at Pt. Lee Chengalvarayan Polytechnic.



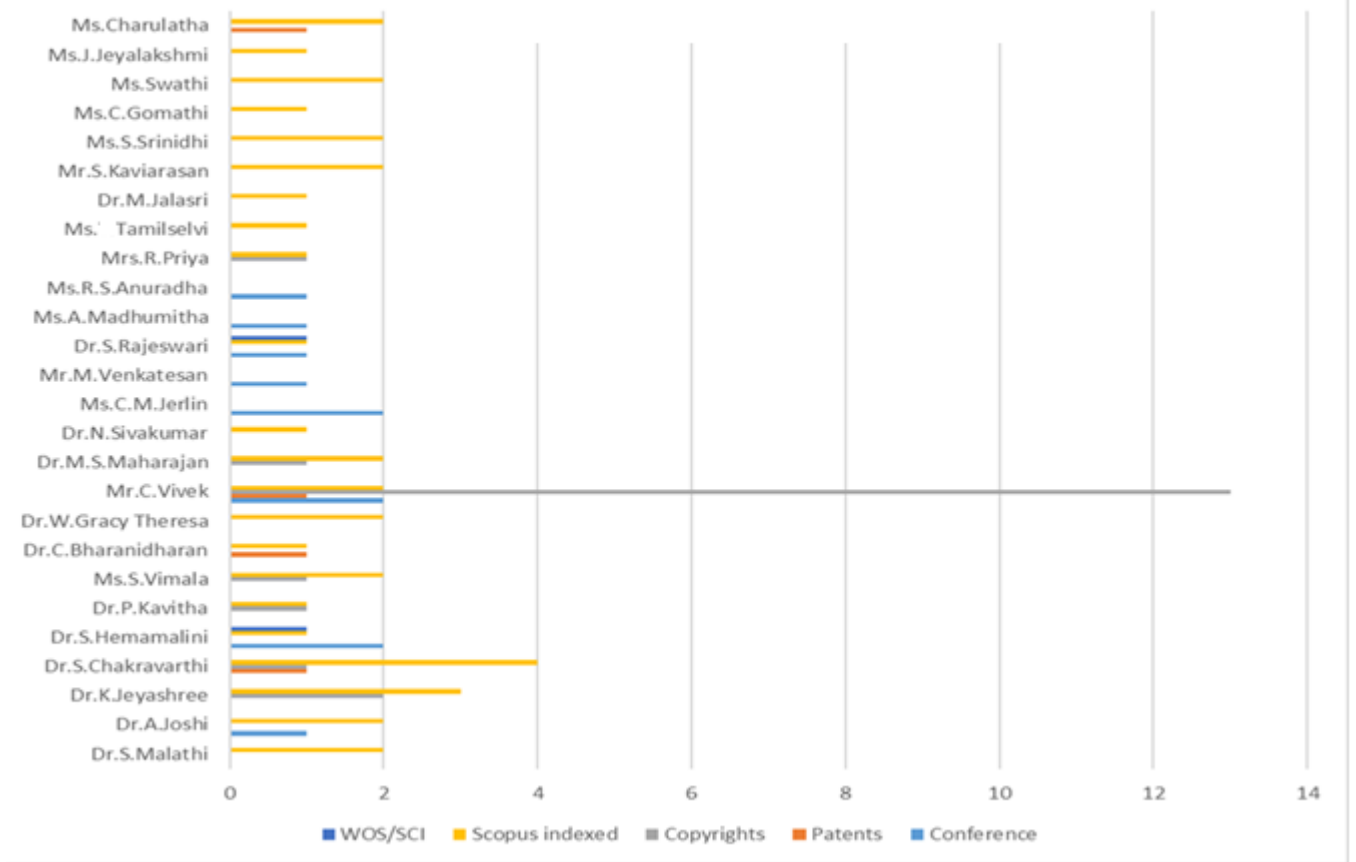
Dr.S. Hemamalini acted as resource person for FDP held at Easwari Engineering College



- Dr. W. Gracy Theresa guided an IoT-based Home Cleaning Robot project focusing on smart automation and remote control applications.
- Dr. N. Sivakumar guided the final year students to develop Robotics-based Line Follower Bot project emphasizing autonomous navigation and sensor-based control.
- Under the guidance of Dr. K. Jayashree students developed an Emergency Vehicle System integrating IoT and AI for intelligent traffic signal prioritization.
- Mrs. S. Swathi supported a Home Automation System project based on IoT and AI, aimed at smart monitoring and control of household devices.
- During the academic year 2023–24, 2 Ph.D. scholars were newly registered and are currently pursuing their research under the guidance of Dr. S. Malathi and Dr. K. Jayashree.

**Achievements/Recognitions**

**FACULTY PUBLICATIONS AND IPRs**



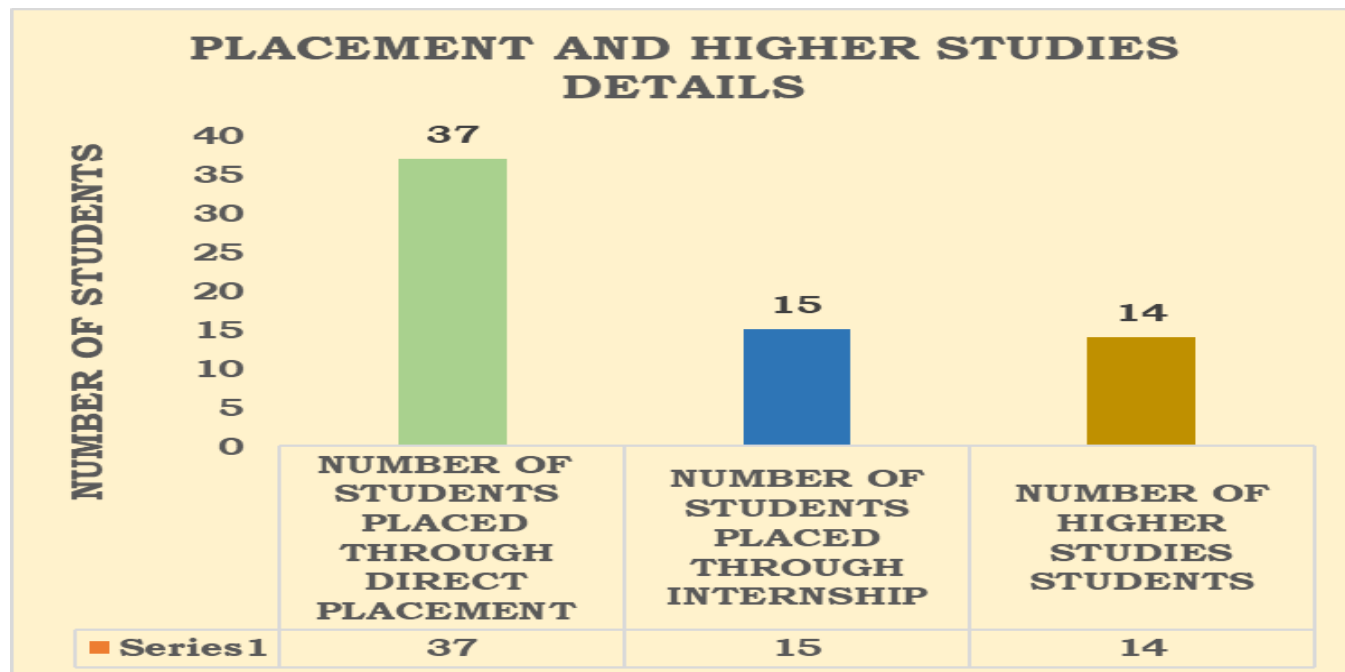
**STUDENTS ACTIVITIES**

S. NO	NAME OF THE ACTIVITY	COUNT
1	PARTICIPATION IN HACKATHON	17
2	ORACLE/TCSion CERTIFICATION	29
3	STUDENTS PUBLICATIONS IN CONFERENCES, COPYRIGHTS/PATENTS OWNED	13
4	STUDENTS PUBLICATIONS IN JOURNALS	03
5	PARTICIPATION IN WORKSHOPS	65
6	STUDENTS PARTICIPATED IN OUTSIDE EVENTS	38

**Student Placement and Internship**

SL. NO.	REGISTER NUMBER	ROLL NUMBER	NAME OF THE STUDENT	PLACED COMPANY NAME	CTC (LPA)
1	211420243002	2020PECAI126	AJAY M	Test Yantra Software Solutions	3.00
				Agilysys	5.80
2	211420243003	2020PECAI127	AMREEN R	Accenture India Pvt. Ltd	4.50
				Qspiders	
3	211420243004	2020PECAI128	ANANDH S P	Hexaware Technologies	4.00
				T- Machine	3.60
4	211420243019	2020PECAI106	HARINI R A	Accenture India Pvt. Ltd	4.50
5	211420243011	2020PECAI102	CLORIN HAFFRIN S	OpenTurf Technologies Pvt Ltd	3.00
6	211420243014	2020PECAI104	DHARSHINI M	Accenture India Pvt. Ltd	4.50
7	211420243024	2020PECAI140	KEERTHIVASAN R S	Munjal University, Punjab	6.00
8	211420243035	2020PECAI111	MURUGESHWARI A	Renault Nissan Technology & Business Centre India	4.50
9	211420243039	2020PECAI115	PAVITRA D	OpenTurf Technologies Pvt Ltd	3.00
				Hexaware Technologies	4.00
				Accenture India Pvt. Ltd	4.50
10	211420243044	2020PECAI152	RIJO BENNY	Accenture India Pvt. Ltd	4.50
				Hexaware Technologies	6.00
				Thirumoolar Software	3.00
11	211420243053	2020PECAI122	SOWMYA SURAPANENI	Persistent	5.00
				T- Machine	3.60
				Mitsogo	4.00
12	211420243057	2020PECAI120	SUBASREE SUDHAKAR	Accenture India Pvt. Ltd	4.50
				Qspiders	
13	211420243005	2020PECAI101	ANOO R	Accenture India Pvt. Ltd	4.50
				QSpiders Training	
14	211420243301	2020PECAI201	EBINO FREDERIC R	Amazon	2.55
15	211420243058	2020PECAI121	SUPRIYA K V	Avasoft	5.00
16	211420243040	2020PECAI116	PRIYADHARSHINI S	Undergoing QSpiders Training	
17	211420243047	2020PECAI154	SABARINATH S		
18	211420243049	2020PECAI157	SELVALINGESHWARAN R		
19	211420243022	2020PECAI138	JOTHEESWARAN M		

**Student higher studies**



**Competitive Success**

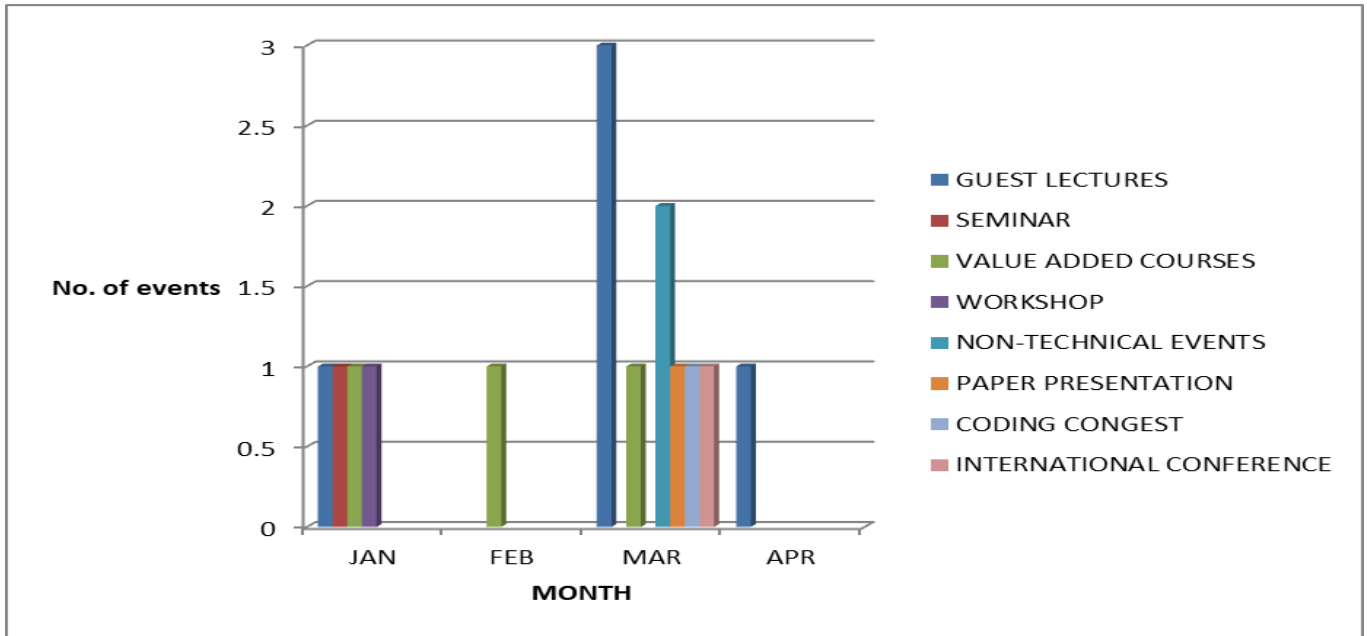
Percentage of students qualifying in state/national/international level examinations out of the graduated students during the last five years

eg.: IIT/JAM/NET/SLET/GATE/GMAT/CAT/GRE/TOEFL/IELTS/Civil services/State government)

Sl.no.	Year	Registration number/roll number for the exam	Names of students selected/ qualified	Name of the qualifying exam			
				GRE	IELTS	DUOLINGO	TOEFL
1	IV	211420243007	ASHWIN M		6.5		
2		211420243012	DEVA DHARSHANA RAJA L		8		
3		211420243028	LOKESHWAR			115	
4		211420243010	BHAVITHRA S K		6.5		
5		211420243060	VASANTHAKUMAR M		7		
6		211420243021	JERRY ALLEN M		6.5		
7		211420243059	TIRUMANYAM VAMSI KRISHNA REDDY	326			
8		211420243056	SANTOSH KUMAR S	320			89
9		211420243063	VISHAL V P	315	7.5		
10		211420243031	MITHILESH KUMAR		7		

**Events Conducted**

Several seminars were organized in association with IEEE Computer Society and IEEE Student Branch. Students who are IEEE members and non-IEEE members of all the societies attended the seminar. These programmes ended with the discussions and the student’s queries were addressed.



**Achiever’s day**

Achiever’s Day is a momentous occasion where we celebrate the remarkable achievements of our college students across various domains. Awards such as the Dr. APJ Abdul Kalam Award, Sports Accomplishment Award, IEEE Xtreme 17.0 Excellence Award, and Appreciation Excellence Award are bestowed upon deserving students in recognition of their outstanding contributions and achievements.



Dhanush Hariharan S, a third-year student of AI & DS department , received the Dr. APJ Abdul Kalam Innovation Award for his outstanding achievements in copyrights, journal publications, and articles.



Muthu Pandi P, a second-year AI & DS student, won the Sports Accomplishment Award for his outstanding performance in long jump.



Anush kumar.V , a third-year student of AI & DS department, received appreciation excellence award for his publication works and research activities.



Dinesh Kumar.S, Adi Kesava Reddy K And Praneth Kumar Reddy of III Yr. emerged as winners of IEEE - XTREME with Global rank - 164,Region rank - 88, Country rank-26 & University Rank – 1.

National and International Certifications

S.no	NAME OF THE NATIONAL & INTERNATIONAL CERTIFICATION	NUMBER OF STUDENTS COMPLETED	CERTIFICATION COMPLETED
1.	PEARSON	5	 <p>A certificate from Pearson/Microsoft for PORSELVAN P, Microsoft Certified: Azure AI Fundamentals. Credential ID: AC096F46362C827, Certification number: 544EAC-ELAB96, Earned on: June 21, 2024.</p>
2.	ORACLE	6	 <p>Oracle Certified Professional Certificate of Recognition for Dhanushree G A, Oracle Certified Professional: Java SE 11 Developer. Issued on April 05, 2024.</p>
3.	TANSAM	14	 <p>Internship Certificate presented to ADRIAN CALVIN K A - 211421243004 of Panimalar Engineering College, pursuing department of Artificial Intelligence and Data Science, 3<sup>rd</sup> year. Internship and Project focused on Data Analytics Using Power BI offered by TANSAM during 11<sup>th</sup> March - 17<sup>th</sup> April, 2024.</p>
4.	NPTEL	15	 <p>Elite NPTEL Online Certification (Funded by the MoE, Govt. of India) awarded to RAMYA R for successfully completing the course Python for Data Science with a consolidated score of 60%. Online Assignments: 23.75/25, Proctored Exam: 35.88/75. Total number of candidates certified in this course: 7596.</p>
5.	NASSCOM	1049	 <p>GOLD CERTIFICATE awarded to AKSHAYA BHARATHI for successfully cleared the assessment on Cybersecurity Analysis &amp; Design. Aligned to Competency Standards developed by IT-ITeS Sector Skills Council. NASSCOM in collaboration with Industry and approved by Government.</p>

Research works

S. No.	Name of the student	Copyright / Patent	Registration number	Date of filing	Title of the work	Guide name
1	Akshaya Venkatesan	Copyright	L-145414/2024	20-03-2024	Donor Connect: A humanitarian application accessible on iOS and Android	Mr. Vivek Chidambaram
2	G M Swetha	Copyright	L-145414/2024	20-03-2024	Donor Connect: A humanitarian application accessible on iOS and Android	Mr. Vivek Chidambaram
3	Induru Praneth Kumar Reddy	Copyright	L-142183/2024	29-01-2024	Automated gas leak mitigation system for industrial safety	Mr. Vivek Chidambaram
4	Dinesh P	Copyright	L-142183/2024	29-01-2024	Automated gas leak mitigation system for industrial safety	Mr. Vivek Chidambaram
5	Dhanush Hariharan S	Copyright	L-140757/2024	08-01-2024	Adaptive quality of service enhancement in wireless networking via centroid fusion	Dr. V. Subedha
6	Dinesh P	Copyright	L-140525/2024	04-01-2024	AI-based skin health application	Dr. K. Jayashree
7	Manikandan V	Copyright	L-140525/2024	04-01-2024	AI-based skin health application	Dr. K. Jayashree
8	Dhanush Hariharan S	Copyright	L-139225/2023	22-12-2023	AI-Fashgen: AI-powered fashion generation and customization platform	Mr. Vivek Chidambaram
9	Atchayaraj S	Copyright	L-139225/2023	22-12-2023	AI-Fashgen: AI-powered fashion generation and customization platform	Mr. Vivek Chidambaram
10	Jeffery Matthews	Copyright	L-139225/2023	22-12-2023	AI-Fashgen: AI-powered fashion generation and customization platform	Mr. Vivek Chidambaram

### TECHNICAL SYMPOSIUM

**The Technical Symposium was held, featuring participation from several students outside the college who engaged in various activities. The event concluded in a spectacular manner.**



**INNOVATIVE PROJECT**



Designed 3D printer with low cost by Anush kumar V, Dhanush Hariharan S, Challapalli Manikantaa, Manigandaa C

**PEC CODE QUEST**

**PANIMALAR ENGINEERING COLLEGE**  
 (An Autonomous Institution affiliated to Anna University, Chennai)  
 Bangalore Trunk Road, Varadharajapuram, Nasarathpettai,  
 Poonamallee Chennai – 600123.

PEC Code Quest – 2024

WINNERS

POSITION	TEAMNAME	NAME	ROLL No.	DEPT	PRIZE AMOUNT
1	ATCAC	Alchaiyaraj S	2021PECAI236	AI&DS	Rs.5000
		Adrian Calvin K A	2021PECAI229		
2	RedHat	Domesan U	2021PECCS392	CSE	Rs.3000
3	TeamNeo	K R Nijandhan	2021PECEE163	EEE	Rs.2000
		Venis Xavier V	2021PECEE201		
4	Attack On Technology	Ramchandru R	2021PECIT191	IT	Rs.1000
		Siranjeevi P	2021PECIT205		
5	CodeBreakers	Roffin Jason N	2021PECCB222	CSBS	Rs.500
		Arun Kumar C	2021PECCB172		

Students participated in the PEC Code Quest event, winning and earning cash prizes.

**PECTEAM INTERNATIONAL CONFERENCE**

The PECTEAM 2024 International Conference was held, featuring paper presentations from students both within and outside the college. The event was concluded in a grand manner.



*We appreciate your continued support and invite you to stay connected for our forthcoming edition. - Prof.Dr.S.Malathi, Prof.S.Srinidhi*

*Stay Connected with AI & DS*