

# **PANIMALAR ENGINEERING COLLEGE**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

## **NEURO NEXUS CLUB**

**Year & Month of Establishment: 13<sup>th</sup> DEC 2023**

### **Objective:**

A NeuroNexus Club for engineering undergraduate student aims to:

1. Understand the deployment of sophisticated edge AI applications like generative AI, computer vision, and advanced robotics .
2. Prepare the students to meet the requirements of industry.
3. Develop different application in various technologies

**Targeted Audience:** Students Interested in Deep Learning, AI and ML

### **Outcomes:**

- 1. To precisely state the classical algorithms, models, and theories in the area.**
- 2. Students should be able to identify appropriate algorithm given a practical task.**
- 3. Students should also be able to implement and solve the tasks using deep learning techniques.**

## **Faculty Coordinator**

**Dr.R.JOSPHINELEELA, Professor /CSE**

## **Student Coordinators**

**1.Mr.CHANDRAMOHITH (III CSE G)**

**2.Ms.R.G.NIKITHA**

**3.Ms.K.V.NIKITHA**

**4. Mr.G.RAJA MEENAKSHI SUNDARAM**

**Linkedin:**

**<https://www.linkedin.com/company/neuro-nexus-club/>**

## Academic Year 2024-25(ODD)

### NEURONEXUS CLUB ACTIVITIES

S.no	Activities	Topics	Date	No.of Students	Resource person
1.	Competition	UI/UX Blitz	31/07/24	65	Dr.R.Josphineleela Professor
2.	Competition	Nvidia Project Ideathon	01/08/24	70	Dr.R.Josphineleela Professor
3.	Competition	Star Developers	9/8/24 (Online) & 14/8/24 (Offline)	65	Dr.K.Mani, Principal Dr.L.Jabasheela Prof & Head
4.	Workshop	AI	11/9/24	70	Mr.P.Chandramohith, Ms.Nikitha R.G., Ms.K.VNikhitha, Mr.G.RajaMeenakshi Sundaram (III CSE students)
5.	Workshop	AI	26/9/24	70	Mr.GuruPrathosh, Final Flyer

## 1. Name of the event: UI/UX BLITZ COMPETITION



Department of Computer Science and Engineering at Panimalar Engineering College has conducted **UI/UX Blitz Competition on 31/07/24**. 65 students have participated and benefited. Students can improve professionalism, lucidity, and a contemporary vibe. Enhance the content by making sure it is understandable and informative. Dr. R. Josphineleela, Prof/CSE has coordinated this event.

## 2. Name of the Event: NVIDIA PROJECT IDEATHON



Department of Computer Science and Engineering at Panimalar Engineering College has conducted the **NVIDIA PROJECT IDEATHON on 01/08/24**. Neuro nexus club 70 students participated and got benefited. Ideations are intense brainstorming sessions when people with various experiences, interests, and skill sets come together to diagnose predetermined problems. Dr. R. Josphineleela, Prof/CSE has coordinated this event.

### 3. Name of the event: STAR DEVELOPERS COMPETITION



Department of Computer Science and Engineering at Panimalar Engineering College has conducted **STAR DEVELOPERS COMPETITION** on 9/8/24(Online) & 14/8/24 (Offline). Neuro nexus club 65students participated and got benefited. Continuous Improvement: Students can learn from your experiences and keep improving your skills by analyzing the outcomes of your activities. **Dr.L.Jabasheela, Prof & Head** and **Dr.K.Mani, Principal** played their roles as Jury members phenomenally and were supportive during this event. **Dr.R.Josphineleela, Prof/CSE** has coordinated this event.

### 4. Name of the event: Workshop on AI



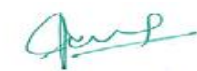
Panimalar Engineering College's Department of Computer Science and Engineering held an **AI Workshop** on 11/9/24. AI Workshop demonstrates the potential applications of artificial intelligence technology. Over seventy pupils have happily participated. **Mr.P.Chandramohith, Ms.Nikitha R.G., Ms.K.VNikhitha, Mr.G.RajaMeenakshiSundaram** (III CSE students) club coordinators have acted as a resource person for this event. This event has been organized by Prof./CSE DR. R. JOSPHINLEELA

## 5. Name of the event: Workshop on AI



Panimalar Engineering College's Department of Computer Science and Engineering held an AI workshop on 26/9/24. Mr. Guru Prathosh, Final Flyer has imparted valuable knowledge and his expertise to the students. 70 students have participated. This event has been organized by Prof / CSE Dr. R. JOSPHINLEELA. Students can acquire the information, abilities, and understanding required to integrate AI solutions into their present procedures over the workshop sessions.

  
COORDINATOR  
Dr. R. JOSPHINELEELA

  
HOD-CSE  
Dr. I. JabaSheela

## Academic Year 2023-24

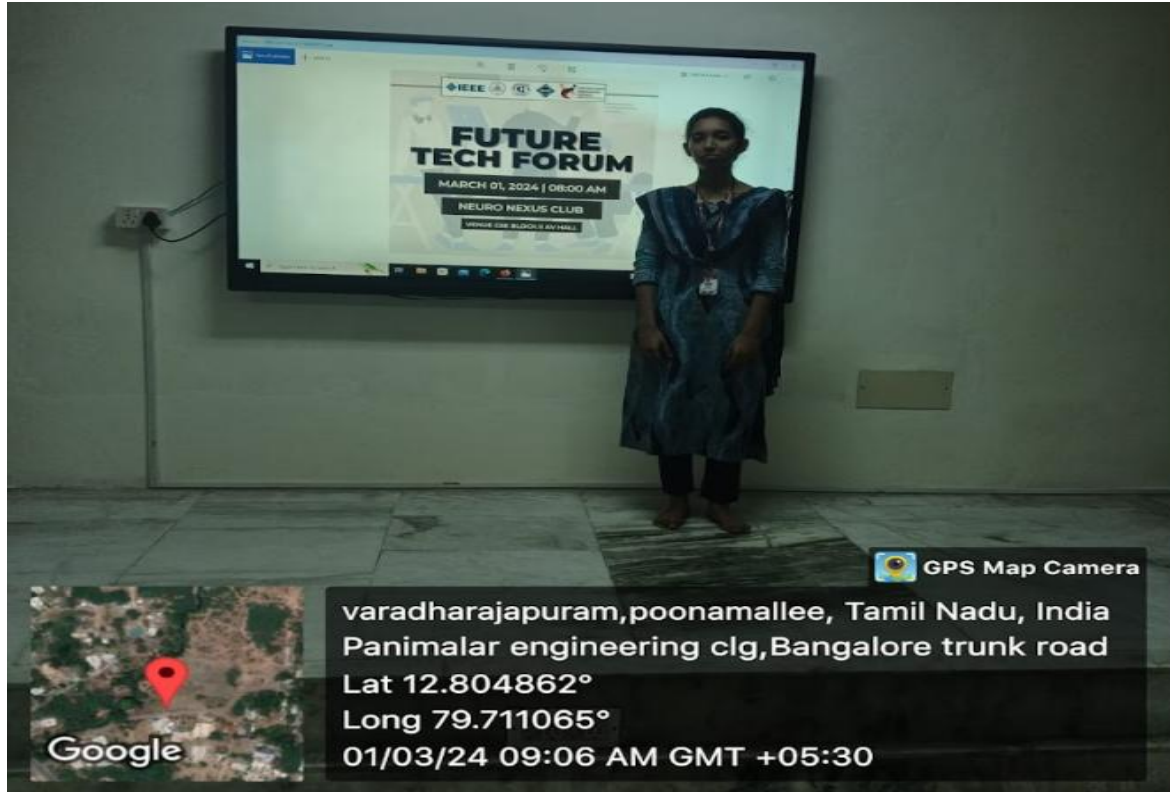
### NEURONEXUS CLUB ACTIVITIES

S.no	Activities	Topics	Date	No.of Students	Resource person
1	Competition	Future Tech Forum	01/03/24 & 7/3/24	70	Dr.R.Josphineleela Professor(Internal)
2	Competition	AI apex	20/03/24	70	Dr.R.Josphineleela Professor(Internal)
3	Competition	AI video Synthesis	19/02/24	70	Dr.R.Josphineleela Professor(Internal)
4	Workshop	Machine Learning	26/02/24	70	Mr.VarunManiappan Amrita University External(student)
5	workshop	Machine Learning	27/02/24	70	Mr.PalgunTahtippam ula IIT Madras External
6	Guest Lecture	Innovation in engineering	29/07/23	70	Dr K SBalamurugan Professor & Head ECE Department KarpagaVinayaga College of Engineering & Technology, Chengalpattu, Tamil Nadu, India
7	Guest Lecture	Deep learning models and Applications in computer vision	25/7/23	70	Dr P. Vidyullatha Associate rofessor Department of CSE  Konerulakshmaiah education foundation Guntur, AP, India
8	Competition	Poster Maker	25/08/23	70	Dr.V.Subedha , Prof Internal

9	Guest Lecture	Procedure to block your seat for guvi's college to corporate program	25/09/23	70	Mr. deepak program head Guvi geek network private limited
10	Short term course	Game development	26-08-23- 23-09-23	70	Dr.A.Vijayalakshimi, Head ,Department of Data science, dwaraka doss goverdhan doss vaishnav college

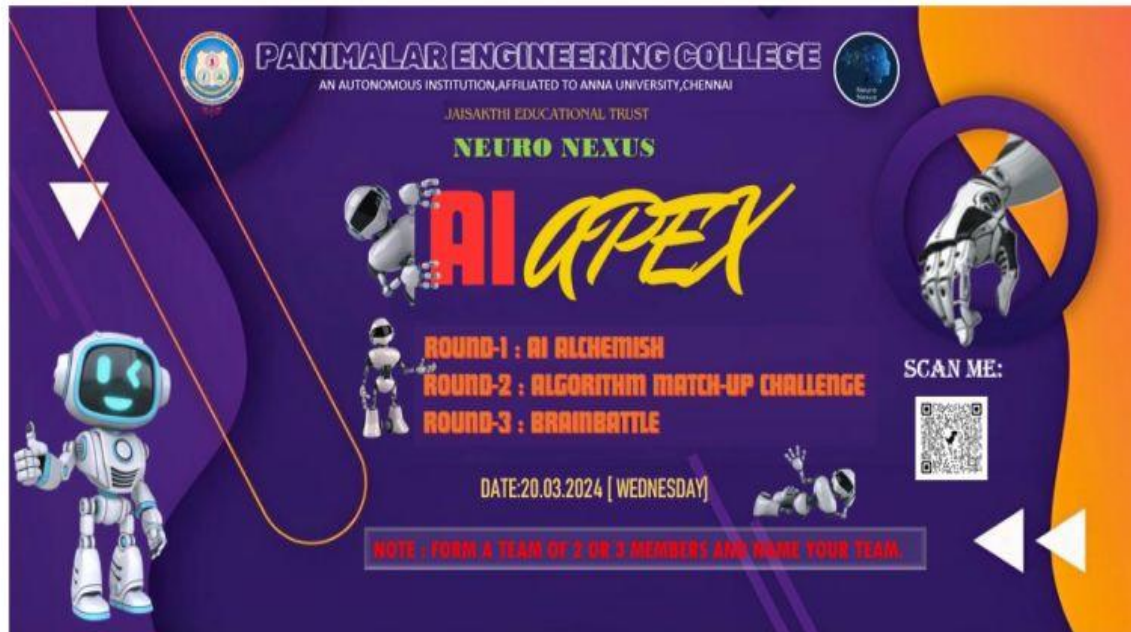


## 1. Name of the event: Competition Future Tech Forum



Department of Computer Science and Engineering at Panimalar Engineering College has conducted Future Tech Forum Competition on 01/03/24 & 7/3/24. The theme for this year is "AI Transformation in Future tech: Crafting a Pathway to Seamlessly Integrate Artificial Intelligence into Financial Services," which will test your ability to understand the nuances of future tech integration. Provide a succinct and clear executive summary of any solution (which may also be product-based) that has to be briefly discussed! Information about the submission: A presentation consisting of two to three slides, omitting the cover and appendix, must be turned in by each team. More than 100 students are participated and got benefited. Dr.R.Josphineleela, Prof/CSE has coordinated this event .

## 2. Name of the Event: AI apex Competition



Department of Computer Science and Engineering at Panimalar Engineering College has conducted Future Tech Forum Competition on 20/03/24. The Rules and regulations are framed and 3 rounds are conducted for the students to select the winner and runner. More than 100 students are participated and got benefited. Dr.R.Josphineleela, Prof/CSE has coordinated this event.

### 3. Name of the event: AI video Synthesis Competition



The poster is for an AI Video Synthesis Contest. At the top left is the Panimalar Engineering College logo. The main header reads 'PANIMALAR ENGINEERING COLLEGE' in large white letters on a blue background. Below this, it states 'AN AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY CHENNAI. APPROVED BY AICTE NEW DELHI & ACCREDITED BY NBA BANGALORE TRUNK ROAD, VARADHARAJAPURAM, POONAMALLEE, CHENNAI - 600 123. DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING'. A row of logos includes IEEE, Anna University, Panimalar Engineering College, ACM, and the Institution's Innovation Council. The central text reads 'Neuro Nexus presents AI VIDEO SYNTHESIS CONTEST'. On the left, a stylized blue head with circuitry is shown. Dates and modes are listed: '09.02.2024 FRIDAY MODE : ONLINE' and '19.02.2024 MONDAY MODE : OFFLINE'. The organizing committee is listed at the bottom: Dr. P. Chinnadurai (Secretary & Correspondent), Mrs. C. Vijayarajeswari, Dr. C. Sakthi Kumar, and Dr. Saranya Sree Sakthi Kumar (Directors); Dr. K. Mani (Principal), Dr. L. Jabasheela (HOD - CSE), Dr. Kavitha Subramani (Professor, CSE), Dr. V. Subedha (Professor, CSE), and Dr. R. Josphineleela (Coordinators) (Convenors).

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

IEEE Advancing Technology for Humanity  
ANNA UNIVERSITY  
Panimalar Engineering College  
ACM  
INSTITUTION'S INNOVATION COUNCIL  
Office of Excellence

**Neuro Nexus**  
presents  
**AI VIDEO SYNTHESIS CONTEST**

09.02.2024  
FRIDAY  
MODE : ONLINE

19.02.2024  
MONDAY  
MODE : OFFLINE

Dr.P.Chinnadurai  
SECRETARY & CORRESPONDENT

Mrs.C.Vijayarajeswari  
Dr. C. Sakthi Kumar  
Dr.Saranya Sree Sakthi Kumar  
DIRECTORS

Dr. K.Mani  
PRINCIPAL

Dr.L.Jabasheela  
HOD - CSE

Dr.Kavitha Subramani  
PROFESSOR, CSE

Dr.V.Subedha  
PROFESSOR, CSE

Dr.R.Josphineleela  
COORDINATORS

Convenors

Panimalar Engineering College's Department of Computer Science and Engineering held an AI VIDEO SYNTHESIS CONTEST Competition on February 19–24. Students can optimise the models they have learned, apply the algorithms to real-world problems, and report on the expected accuracy that can be attained by using the models. Over seventy pupils have happily participated. This event has been organized by Prof./CSE DR. R. JOSPHINEELA

#### 4. Name of the event: Workshop on Machine Learning

The poster features the Panimalar Engineering College logo on the top left, which includes the text 'PANIMALAR ENGINEERING COLLEGE, CHENNAI' and 'JAISAKTHI EDUCATIONAL TRUST'. The main title 'PANIMALAR ENGINEERING COLLEGE' is in large white letters, with 'An Autonomous Institution' in a red box below it. Further down, it says 'Affiliated to Anna University, Chennai (JAISAKTHI EDUCATIONAL TRUST)' and 'DEPARTMENT OF CSE'. On the top right, there is a 'Neuro Nexus' logo with a blue brain graphic. Below the college name, there are logos for IEEE, Anna University, and the Institution's Innovation Council. The event title 'NEURO NEXUS presents Machine Learning workshop' is prominently displayed. A circular portrait of Varun Maniappan, a young man with a mustache wearing a yellow and black striped polo shirt, is shown on the right. Below his name, it says 'AMRITA UNIVERSITY'. The 'ML WORKSHOP AGENDA' is listed on the left, containing seven items. The event details are: 'MODE: ONLINE', 'TIME 7PM-8PM', and '26 FEB 2024'. At the bottom, the organizing staff are listed: Dr. P. Chinnadurai (Secretary & Correspondent), Mrs. C. Vijayarajeswari, Dr. C. Sakthi Kumar, and Dr. Saranya Sree Sakthi Kumar (Directors). Below them are Dr. K. Mani (Principal), Dr. L. Jabasheela (HOD - CSE), Dr. Kavitha Subramani (Professor, CSE), Dr. V. Subedha (Professor, CSE), and Dr. R. Josphineleela (Coordinators).

**PANIMALAR ENGINEERING COLLEGE**  
An Autonomous Institution  
Affiliated to Anna University, Chennai  
(JAISAKTHI EDUCATIONAL TRUST)  
DEPARTMENT OF CSE

**NEURO NEXUS**  
presents  
**Machine Learning workshop**

**ML WORKSHOP AGENDA**

1. Introduction on what is machine learning.
2. Types of Machine Learning (Supervised, Unsupervised, Reinforcement)
3. Venn diagram of AI (AI, ML, DL, Gen-AI)
4. What are the type of problems that we solve in Machine Learning (Classification & Regression)
5. What are the libraries required for machine learning.
6. What is data-preprocessing (Feature engineering, Feature Imputation, what are the types of data we encounter while we solve a machine learning problem)
7. Introduction to linear regression (What is linear regression, How we use linear regression, code example for linear regression)

**MODE: ONLINE**  
**TIME 7PM-8PM**

**26 FEB 2024**

**VARUN MANIAPPAN**  
AMRITA UNIVERSITY

**Dr.P.Chinnadurai**  
SECRETARY & CORRESPONDENT

**Mrs.C.Vijayarajeswari**

**Dr. C. Sakthi Kumar**

**Dr.Saranya Sree Sakthi Kumar**  
DIRECTORS

**Dr. K.Mani** **Dr.L.Jabasheela** **Dr.Kavitha Subramani** **Dr.V.Subedha** **Dr.R.Josphineleela**  
PRINCIPAL HOD - CSE PROFESSOR, CSE PROFESSOR, CSE COORDINATORS

Panimalar Engineering College's Department of Computer Science and Engineering held Machine learning workshop in online mode on 26/02/24. More than 70 students have participated. This event has been organized by Prof / CSE DR. R. JOSPHINEELA. Students can understand the basic theory underlying machine learning and able to formulate machine learning problems corresponding to different applications.

## 5.Name of the event: Workshop on Machine Learning

**PANIMALAR ENGINEERING COLLEGE**  
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(JAISAKTHI EDUCATIONAL TRUST)  
DEPARTMENT OF CSE

**NEURO NEXUS**  
presents  
**Machine Learning workshop**

**MODE: ONLINE**  
**TIME 7PM-8PM**

**ML WORKSHOP AGENDA**

- 1. INTRODUCTION**
  - BRIEF SELF-INTRODUCTION
  - OVERVIEW OF THE SEMINAR AGENDA
  - IMPORTANCE OF OBJECT DETECTION, CLASSIFICATION, SEGMENTATION, AND TRACKING
- 2. OBJECT DETECTION**
  - DEFINITION AND APPLICATIONS OF OBJECT DETECTION
  - BASICS OF IMAGE PROCESSING AND COMPUTER VISION
  - INTRODUCTION TO POPULAR ALGORITHMS LIKE YOLO
  - SHOWCASE OF EXAMPLES AND RESULTS
- 3. OBJECT CLASSIFICATION**
  - DEFINITION AND IMPORTANCE OF OBJECT CLASSIFICATION
  - OVERVIEW OF CLASSIFIERS, INCLUDING PERCEPTRON, SUPPORT VECTOR MACHINES, AND DEEP NEURAL NETWORKS
  - INTRODUCTION TO TRANSFER LEARNING FOR IMAGE CLASSIFICATION
  - PRACTICAL EXAMPLES AND USE CASES
- 4. OBJECT SEGMENTATION**
  - DEFINITION AND IMPORTANCE OF OBJECT SEGMENTATION
  - TECHNIQUES SUCH AS SEMANTIC AND INSTANCE SEGMENTATION
  - INTRODUCTION TO SEGMENTATION MODELS LIKE U-NET
  - EXAMPLES AND DISCUSSION OF CHALLENGES IN SEGMENTATION
- 5. OBJECT TRACKING (OR HIGHLIGHTS)**
  - DEFINITION AND APPLICATIONS OF OBJECT TRACKING
  - OVERVIEW OF TRACKING ALGORITHMS LIKE KALMAN FILTER ETC.
  - TRACKING IN THE CONTEXT OF DEEP LEARNING, INCLUDING RECURRENT NEURAL NETWORKS
  - REAL-WORLD EXAMPLES AND CHALLENGES IN OBJECT TRACKING
  - INFO ABOUT RESEARCH AND MERITISED RESEARCH

**PALGUN TAH TIPAMULA**  
IIT BASARA

**27 FEB 2024**

**Dr.P.Chinnadurai** SECRETARY & CORRESPONDENT  
**Mrs.C.Vijayarajeswari** DIRECTORS  
**Dr. C. Sakthi Kumar** DIRECTORS  
**Dr.Saranya Sree Sakthi Kumar**

Panimalar Engineering College's Department of Computer Science and Engineering held Machine learning workshop in online mode on 27/02/24. More than 70 students have participated. This event has been organized by Prof / CSE DR. R. JOSPHINEELA. Students can understand a range of machine learning algorithms along with their strengths and weaknesses. Students can apply machine learning algorithms to solve problems of moderate complexity.

## 6 Name of the event: Guest lecturer on Innovation Engineering

**Panimalar Engineering College**  
An Autonomous Institution Affiliated to Anna University Chennai,  
Approved By AICTE New Delhi and Accredited by NBA  
Bangalore Trunk Road, Varadharajapuram, Ponnammalle, Chennai-600123

**Department of CSE**

**GUEST LECTURE ON INNOVATION IN ENGINEERING**  
Date: 29th July 2023  
Time: 9:30AM  
Online mode

**DR.K.S. BALAM JRUGAN**  
Professor and Head of Dept of ECE,  
Karpaga Vinayaga College of Engineering & Technology.

**Dr.P.Chinnadurai** SECRETARY & CORRESPONDENT  
**Mrs.C.Vijayarajeswari** DIRECTORS  
**Dr.C.Sakthi Kumar** DIRECTORS  
**Dr.Saranya sree sakthi kumar**

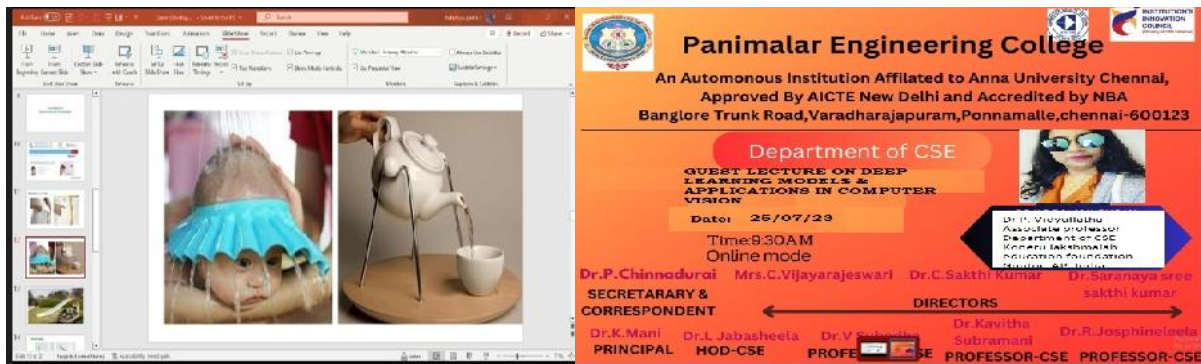
**Dr.K.Mani** PRINCIPAL  
**Dr.L.Jabasheela** HOD-CSE  
**Dr.V.Subashini** PROFESSOR-CSE  
**Dr.Kavitha Subramani** PROFESSOR-CSE  
**Dr.R.Josphineela** PROFESSOR-CSE

**संयुक्त राष्ट्र प्रविष्टि - भारत**  
India's Digital First and Next in Innovation System  
**NATIONAL INNOVATION SYSTEM - INDIA**  
Department of Innovation Engineering

**Dr.Kavitha Subramani**

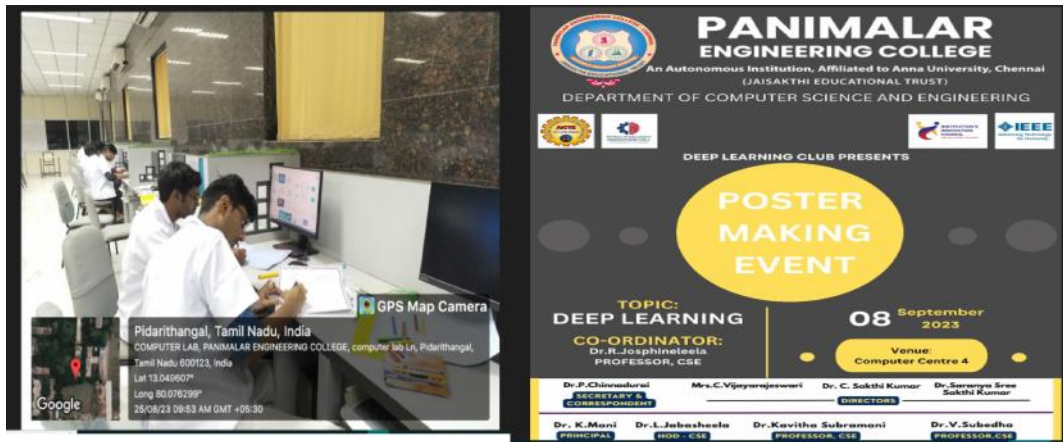
Department of Computer Science and Engineering at Panimalar Engineering College has conducted Guest Lecture on Innovation in Engineering on 29/07/23 at online mode. Even conservative leaders may be more open to technological investments if they are aware that the market potential has previously been assessed. An innovation habit is formed through working in quick cycles of brainstorming, prototyping, and testing. Dr K S Balamurugan conducted the guest lecturer and he is currently working as Professor & Head in ECE Department of Karpaga Vinayaga College of Engineering & Technology, Chengalpattu, Tamilnadu, India.. He has More than 80 students participated and benefited from the event. Dr.R.Josphineleela, Prof/CSE coordinated the event.

## 7. Name of the Event: Guest Lecture on Deep learning models and Applications in computer vision



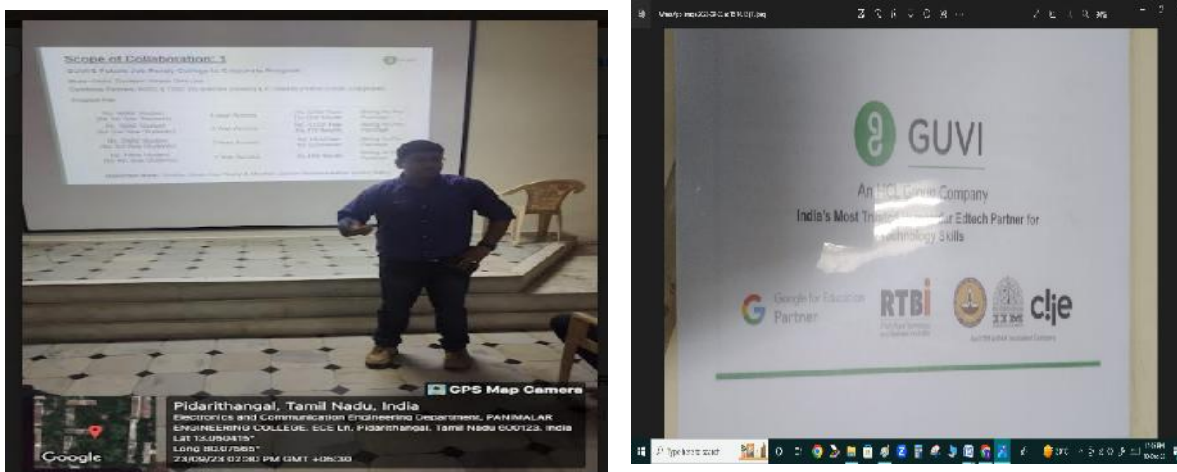
Department of Computer Science and Engineering at Panimalar Engineering College has conducted Guest Lecture on the topic of Deep learning models and Applications in computer vision on 25/7/23 by Dr P. Vidyullatha, Associate professor, Department of CSE, Konerulakshmaiah education foundation, Guntur, AP, India.(External). Students learnt about Computer Vision and Deep Learning as a field of study and research. First we'll be exploring several Computer Vision tasks and suggested approaches, from the classic Computer Vision perspective and deep learning algorithms. More than 50 students are participated and got benefited. Dr.R.Josphineleela, Prof/CSE has coordinated this event

## 8.Name of the Event: Poster Maker Competition



Department of Computer Science and Engineering at Panimalar Engineering College has conducted Poster maker competition on 25/08/23 to corporate program Aligning courses with industry needs driving learner's engagement Creating customized learning paths Ensuring success through governance. More than 50 students are participated and got benefited. Dr.R.Josphineleela, Prof/CSE has coordinated this event .The goal of the poster-making competition is to encourage students' creative expression and to assess their knowledge and understanding of various trends in business and management. The purpose of the poster-making competition is not only to evaluate the students' artistic abilities, but also to get them thinking about current trends in business and management.

## 9. Name of the Event: Guest Lecture on Innovation in engineering



Department of Computer Science and Engineering at Panimalar Engineering College has conducted Guest Lecture on the topic of Procedure to Block your Seat for Guvi's college to

corporate program on 25/09/23. Aligning courses with industry needs driving learner's engagement Creating customized learning path ensuring success through governance. More than 100 students are participated and got benefited. Dr.R.Josphineleela, Prof/CSE has coordinated this event

## 10. Name of theEvent:Short term course on Game Development

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BANGALORE TRUNK ROAD, VARADHARAJAPURAM, POONAMALLEE, CHENNAI - 600 123.  
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

(Online) **SHORT TERM COURSE ON**  
**GAME DEVELOPMENT**

**Mr.Faraz Ahmed AS**  
Research Scholar  
Department of Computer science  
VIT Chennai

**26.08.2023**  
ONWARDS  
( 5 Saturdays )  
10.30 AM - 11.30 AM

**LINK TO JOIN**  
<http://mail.google.com/ds-wxcu-xin>

**Dr.P.Chinnadurai** SECRETARY & CORRESPONDENT  
**Mrs.C.Vijayarajeswari** DIRECTORS  
**Dr. C. Sakthi Kumar** DIRECTORS  
**Dr.Saranya Sree Sakthi Kumar** DIRECTORS

**Dr. K.Mani** PRINCIPAL  
**Dr.L.Jabasheela** HOD - CSE  
**Dr.Kavitha Subramani** PROFESSOR, CSE  
**Dr.V.Subedha** PROFESSOR, CSE  
**Dr.R.Josphineleela** PROFESSOR, CSE

**Dr. K.Mani** PRINCIPAL  
**Dr.L.Jabasheela** HOD - CSE  
**Dr.Kavitha Subramani** PROFESSOR, CSE  
**Dr.V.Subedha** PROFESSOR, CSE  
**Dr.R.Josphineleela** PROFESSOR, CSE

Convenors



The Department of Computer Science and Engineering, in collaboration with GUVI, is organizing a five-day STC event for second-year students on the subject of game development from August 26 to September 23, 2023(5 Saturdays). Following program completion, the student will be able to create many gaming applications using industry-standard hardware and software. Take the initiative or participate in a group-based, interdisciplinary game production project. To facilitate an entrepreneurial position in the gaming business, familiarize yourself with industry best practices. Over ninety kids took part in the program mentioned above and profited from it. With this program, Drs. R. Josphineleela and Dr.V. Subedha have coordinated.

*R. Josphineleela*  
COORDINATOR  
**Dr.R.JOSPHINELEELA**

*L. Jabasheela*  
HOD-CSE  
**Dr.L.JABASHEELA**  
Professor & Head  
Department of Computer Science and Engineering  
Panimalar Engineering College  
Chennai - 600123