



P.A. COLLEGE OF ENGINEERING

Affiliated to VTU | Approved by AICTE
Recognized by Govt. of Karnataka

Online Faculty Development Programme on

DEEP LEARNING INTELLIGENT VIDEO ANALYTICS & COMPUTER VISION



21st January, 2025 to 27th January, 2025

06:00 PM to 09:30 PM

About P. A. College of Engineering

P.A. College of Engineering (PACE) was established in the year 2000 under the aegis of PAET, with an aim to provide a career-oriented professional education and to produce technically competent engineers with moral and ethical values. The institution is dedicated to promote an effective learning environment that encourages excellence and diversity in thoughts and endeavour. PACE is affiliated to the Visvesvaraya Technological University (VTU), Belgaum and is approved by the All India Council for Technical Education (AICTE), New Delhi, recognized by the Government of Karnataka and is certified to ISO 9001-2008. PACE is located in Mangalore which is well connected to the rest of the country by air, rail and road. Nestled amidst lush greenery, P. A. College of Engineering celebrates the serene splendor of pristine nature. Spread across 60 acres, the college offers the perfect setting for an academic environment.

About Department of Artificial Intelligence and Machine Learning

The Department of AI/ML Engineering was established in the year 2021 with a vision to apply AI/ML Skill at various levels like IT knowledge, managerial skills and technical advancements and hence to address the demanding needs of IT industries and R&D sectors. The department is affiliated to Visvesvaraya Technological University (VTU). The Department offers a four years Bachelor degree programme. The Bachelor's programme will help our students for their productive careers in industry, academia, research and government sectors. The Bachelor program of AI/ML will help to utilize the concept of Artificial Intelligence and Machine learning, deep learning in innovative research areas such as Defence Sector, Data science, Pattern Recognition, Image Processing, Data Mining, Database Systems, Network Security, Mobile Communication, Bioinformatics, Parallel Processing, Cloud Computing, Big Data, Hadoop, Block chaining, DevOps and other related areas. To strengthen these research activities, the department has established a well setup of Research and Development Laboratories. The department faculty members have established themselves in nationally and internationally recognized research programs, including those of interdisciplinary nature.

About Faculty Development Programme

A FDP on "Deep Learning, Intelligent Video Analytics, and Computer Vision" aims to equip educators with advanced knowledge in these cutting-edge technologies. The FDP will cover key concepts in deep learning, enabling participants to develop intelligent video analytics systems for real-time object detection, tracking, and facial recognition. Through hands-on sessions, attendees will explore the practical applications of computer vision in fields like security, healthcare, and autonomous systems. This program will enhance faculty skills, preparing them to integrate these advanced technologies into their teaching and research activities.

Target Audience

This program is typically targeted towards faculty members in engineering colleges, researchers, & professionals industries interested advancing their knowledge of AI-driven technologies. It also suitable for educators looking to incorporate cutting-edge video analytics computer vision concepts into curriculum research.

Objectives:

- To provide a comprehensive understanding of deep learning principles and their application in intelligent video analytics and computer vision systems.
- To equip participants with hands-on experience in developing AI-based video analytics solutions, including object detection, tracking, and facial recognition.
- To explore the integration of deep learning techniques in real-world applications across diverse fields such as security, healthcare, and autonomous vehicles.
- To enable faculty members and researchers to incorporate these emerging technologies into their academic curriculum and research projects effectively.

Vision of the Department

To produce competent Electronics and Communication engineers by imparting quality education and skills in trending technology to meet the growing demands of the industry, research & development sectors for producing creative and innovative solutions to societal needs.

Mission of the Department

- *To explore and develop the talents of young minds to meet industry standards by fostering practical learning and critical thinking skills while equipping students with the latest knowledge in electronics and communication.*
- *To promote collaborative research and build strong partnerships with industry and research organizations, encouraging faculty and student involvement in real-world projects to drive innovation and stay at the forefront of the field.*

Program Educational Objectives (PEOs)

- *To provide students with a strong foundation in mathematics, as well as basic science, and enable them to apply these skills in the field of Electronics and Communication Engineering.*
- *To equip the students with technical competence to solve problems in electronics and communication engineering.*
- *To cultivate strong leadership skills in students, enabling them to effectively contribute to interdisciplinary teams.*
- *To prepare students to attain ethical values and moral behavior.*

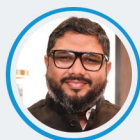
Program Specific Outcomes (PSOs)

- *To apply the technical knowledge to solve real-time problems in signal processing and Digital communication engineering.*
- *To design Embedded systems and VLSI to develop algorithms to address societal and industrial needs.*

Who can attend?

- Students at all levels (ME/MTech/MCA/MSc/PhD) – Computer Science / AIML
- Faculty from Technical Institutions and Universities
- Researchers from Industry

Organizing Committee



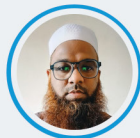
Chief Patron:

Mr. Abdulla Ibrahim
Managing Trustee - PAET
Mangaluru.



Patron:

Dr. Ramis M. K.
Principal- PACE
Mangaluru.



Coordinator:

Dr. Mohammed Zakir B
Assoc. Professor, AIML
P. A. College of Engineering,
Mangaluru.



Coordinator:

Dr. Manjula V
Professor & HOD AIML
P. A. College of Engineering,
Mangaluru.

HOW TO APPLY?

There is no registration fee.

All participants are requested to register using the link of AICTE ATAL portal:

<https://atalacademy.aicte-india.org/signup>

Find this FDP under Workshops. The following filters may be applied

Select state > Karnataka

Select month > January

Select thrust area> Advanced Computing (Supercomputing, AI, Quantum computing)

Search for Application No. of FDP: 1730657072

Address

Near Mangalore University,
Mangaluru, Karnataka, India - 574153

For more details

+91 966 3569 265

+91 819 7603 006

Last Date to Register



Day 1 21st Jan-2025

SESSION 1

T S. DR. HASAN FIRDAUS BIN MOHD ZAKI

Director for Center For Unmanned Technologies, IIUM Malaysia
Years of Exp:13

INTRODUCTION TO DEEP LEARNING

🕒 6:00PM to 7:30PM

SESSION 2

DR. AHMAD JAZLAN BIN HAJA MOHIDEEN

Associate Professor IIUM Malaysia
Years of Exp:13

PYTHON FOR DEEP LEARNING

🕒 8:00PM to 9:30PM

Day 4 24th Jan-2025

SESSION 7

T S. DR. HASAN FIRDAUS BIN MOHD ZAKI

Director for Center For Unmanned Technologies, IIUM Malaysia
Years of Exp:13

OBJECT DETECTION ON VIDEOS

🕒 6:00PM to 7:30PM

SESSION 8

DR. AHMED RIMAZ FAIZABADI

Delloyd R&D Sdn Bhd, Lead AI Specialist
Years of Exp:20

USE CASE OF VIDEO ANALYTICS IN INTELLIGENT TRANSPORT SYSTEM

🕒 8:00PM to 9:30PM

6:30PM to 7:30PM
ONLINE TEST & FEEDBACK

7:30PM to 8:00PM
VALEDICTORY SESSION

Day 2 22nd Jan-2025

SESSION 3

DR. AHMED RIMAZ FAIZABADI

Delloyd R&D Sdn Bhd, Lead AI Specialist
Years of Exp:20

OPENCV

🕒 6:00PM to 7:30PM

SESSION 4

DR.ZULKIFLI BIN ZAINAL ABIDIN

Associate Professor, MCT IIUM.
Years of Exp:14

INTRODUCTION TO PYTORCH (CLASSIFICATION)

🕒 8:00PM to 9:30PM

Day 5 25th Jan-2025

SESSION 9

DR. ZULKIFLI BIN ZAINAL ABIDIN

Associate Professor, MCT IIUM.
Years of Exp:14

DEVELOPMENT CUSTOM OBJECT DETECTOR FOR AERIAL DRONES.

🕒 6:00PM to 7:30PM

SESSION 10

MR. YOUSEF ABD ALHATTAB

Research officer, Center For Unmanned Technologies, IIUM Malaysia
Years of Exp:10 years

VIDEO SEGMENTATION APPLICATION AND EXAMPLES

🕒 8:00PM to 9:30PM

NOTE: 26th JAN IS HOLIDAY

Day 3 23rd Jan-2025

SESSION 5

DR. MUHAMMAD AFIF BIN HUSMAN

Associate Professor IIUM Malaysia
Years of Exp:15

TRANSFER LEARNING

🕒 6:00PM to 7:30PM

SESSION 6

DR. AHMAD JAZLAN BIN HAJA MOHIDEEN

Associate Professor IIUM Malaysia
Years of Exp:13

INTRODUCTION TO EMBEDDED AI

🕒 8:00PM to 9:30PM

Day 6 27th Jan-2025

SESSION 11

DR. MUHAMMAD AFIF BIN HUSMAN

Associate Professor IIUM Malaysia
Years of Exp:15

INTELLIGENT ANALYTICS FOR TRACKING & COUNTING MINI PROJECTS.

🕒 2:00PM to 3:30PM

SESSION 12

MR. YOUSEF ABD ALHATTAB

Research officer, Center for Unmanned Technologies, IIUM Malaysia
Years of Exp:10 years

INTRODUCTION OF MLOPS

🕒 3:30PM to 5:00PM

SESSION 13

DR. ASIF AFZAL

Research professor & Luxembourg University
Years of Exp:14

HOW TO COMPREHEND COMPUTER VISION RESEARCH PAPERS

🕒 5:00PM to 7:30PM