



## FACULTY DEVELOPMENT PROGRAMME

(OFFLINE MODE)

# Machine Learning : A Trajectory through The World of Adaptive Algorithms

Sponsored by



**APJ Abdul Kalam Technological University**  
Trivandrum, Kerala

### Topics to be covered:

- Trends and Opportunities in Machine Learning & Artificial Intelligence
- Python for Machine Learning
- Hands on session on Tools, Platform and Framework for ML/AI
- Introduction to Machine Learning Life Cycle
- Introduction to Preprocessing
- Introduction to Supervised Learning Techniques
- Case Study on Regression
- Case Study on Classification
- Introduction to Unsupervised Learning Techniques
- Introduction to Clustering
- Hands on session on Case Study on Clustering
- Introduction to Dimensionality Reduction
- Hands on session on Case Study on Dimensionality Reduction
- Artificial Neural Network & Case Study
- Introduction to Natural Language Processing
- Case Study on NLP
- Introduction to Computer Vision
- Case Study on CV

### Resource Persons:

- Dr. Vinith R.** (Postdoctoral Fellow, Amrita Viswavidyalaya, Coimbatore)
- Dr. Sreekanth D.** (Head, Solutions & Research Dept., ICT Academy of Kerala)
- Mr. Unnikrishnan P.** (Research Scholar, NIT Calicut)
- Mr. Ummer Shaik** (Solutions Architect Data Science, Reflections Info Systems, Technopark)
- Mr. Abhimanyu K. S.** (AI Consultant, QuEST Global, Technopark)

### Organizing Committee

- Chief Patron: **Msgr. Jose Konnikkara**
- Patrons: **Rev Fr. Thomas Kakkassery, Rev Fr. Jose Kannampuzha**
- Organizing Chairman: **Dr. Sunny Joseph Kalayathangal, Principal, Dr. V. M. Xaviuor, Registrar**
- Coordinator: **Dr. Swapna B Sasi, Associate Professor, Computer Science & Engineering**
- Executive Committee:
  - Prof. Ratnan P.** (Vice Principal)
  - Dr. Jose P Therattil** (Centre Coordinator)
  - Dr. Vijayakumar R.** (Professor, Computer Science & Engineering)
  - Dr. Saju P John** (Professor & Head, Computer Science & Engineering)



22<sup>nd</sup> to 26<sup>th</sup>  
August  
2022

### Contact Details :

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- Ms. Ninu Francis, Assistant Professor, ninufrancis@jecc.ac.in, Mob: 9446045708

Organized by

Department of Computer Science & Engineering

Jyothi Engineering College, Thrissur

in association with

ICT Academy of Kerala



## About the Institution

Jyothi Engineering College (JEC) set up in 2002, under the aegis of Thrissur Educational Trust, founded by the Catholic Archdiocese of Trichur, is a leading engineering college in Kerala. The Archdiocese of Trichur has an illustrious track record of a century and a quarter in the education sector. We at Jyothi Engineering College are aware that our stakeholders, including students and recruiters, look for reliable information on quality education offered. Jyothi Engineering College is a NAAC accredited institution with 'A' Grade, affiliated to APJ Abdul Kalam Technological University, Kerala. The NAAC instrument is developed to objectively assess and grade institutions of higher education. Five of the undergraduate programs offered by Jyothi Engineering College have NBA accreditation, which indicates that we are well recognized for the quality of education we offer. We are periodically evaluated for this stringent NBA accreditation criteria to ensure we sustain the mandated quality levels.

The worlds of study and work have changed dramatically. Students of today require different sets of skills than those of previous generations. We are in the midst of the fourth industrial revolution and the predictions are that 85% of the jobs that will exist in 2030 have not been invented yet. JYOTHI hence prepares students to become T-Shaped professionals, i.e., professionals who have in-depth expertise in their discipline as well as a breadth of competencies required in the twenty-first century. Industry seeks engineers with these skills. In order to train our students to become "T" shaped professionals, so that they are "future ready", we have set up an incubation centre, Integrated Industrial Incubation Centre (IIIC), in association with TATA Technologies.

In order to help students become "job creators" rather than "job seekers", Jyothi Engineering College has also set up a Technology Business Incubator, JEC TBI, to create technology based new enterprises, foster an entrepreneurial spirit among students and commercialize R&D output. Additionally, Jyothi Engineering College offers a vibrant, beautiful, and green environmentally friendly campus, and excellent infrastructure for students, to aid the teaching and learning process. For more information visit [www.jecc.ac.in](http://www.jecc.ac.in)

## About the Department

The Department of Computer Science and Engineering, has a strong team of faculty with high orientation towards research, offers Bachelors and Masters programmes in Computer Science. The department offers an intellectually stimulating learning environment and encourages mentoring of the students by its competent faculty members. The department aims to be an intellectually vibrant learning centre focused on quality education and multidisciplinary research with a view to prepare young, creative and entrepreneurial minds to lead the technological and economic change in the region.

## Vision

Creating ethical leaders in the domain of Computational Sciences through quality professional education with a focus on holistic learning and excellence

## Mission

To create technically competent and ethically conscious graduates in the field of Computer Science and Engineering by encouraging holistic learning and excellence.

To prepare students for careers in Industry, Academia and the Government.

To instill Entrepreneurial Orientation and research motivation among the students of the department.

To emerge as a leader in education in the region by encouraging teaching, learning, industry and societal connect.



## Eligibility

Faculty Members from  
Colleges affiliated to  
APJ Abdul Kalam Technological University  
are eligible to attend the programme

Participation certificate will be  
awarded on successful completion

## Registration

No Registration fee

SCAN ME



Registration  
Link

<https://tinyurl.com/jecfdp>

Last date for Registration: 12.08.2022

Notification of selection :16.08.2022

## About the programme

The broad objective of this Faculty Development Program is to introduce the Trends and Opportunities in Machine Learning & Artificial Intelligence and to impart expertise in one of the most fascinating and fastest growing areas of Computer Science. AI approaches are widely employed in a variety of applications, including Biometrics, Medical Imaging Processing, Natural Language Processing, and in industry, defence, healthcare, agriculture and many other areas. This course will cover the fundamentals of AI and how they apply to various research applications. It would assist in improving the skills and capabilities of faculty members at various engineering universities in India, as well as creating an environment conducive to research and academic success. The goal of the course work is to teach theoretical foundations of artificial intelligence and to provide hands-on training based on the latest AI tools to the audience.