# A One Week Faculty Development Program (FDP)
## *On*
## Artificial Intelligence & Machine Learning with MATLAB
### (OFFLINE MODE)
### 02nd -06th Dec, 2024



### *Organized by*
## Department of Emerging Technologies in Computer Science in Association with Department of ECE

## G. Pulla Reddy Engineering College (Autonomous) Kurnool-518007 Andhra Pradesh, India.

## About the College

G. Pulla Reddy Engineering College is the brainchild of Late Sri G. Pulla Reddy, (popularly known as Sweets Pulla Reddy in A.P.) the renowned philanthropist and a great humanist. Established in 1984- 85, it is one of the earliest private engineering colleges in the state of united Andhra Pradesh. GPREC has been functioning as an autonomous institution since 2006. The College is being managed by G. Pulla Reddy Charities trust, Hyderabad. The trust was instituted by late Sri G. Pulla Reddy Garu in 1977 with the motto of rendering service to the society. The trust has established many educational institutions, hospitals, orphanages, respite homes and other social welfare organizations in various parts of united Andhra Pradesh. G. Narayanamma Institute of Technology & Science (GNITS) –Hyderabad, G. Pulla Reddy College of Pharmacy – Hyderabad, G. Pulla Reddy Dental College – Kurnool are some of the other institutions being managed by this trust.

## About Department:

The Department of Emerging Technologies in Computer Science is offering Computer Science & Business Systems (CSB), Computer Science & Engineering in Data Science (CSD) and Computer Science & Engineering in Artificial Intelligence and Machine Learning (CSM). The Emerging Technologies in Computer Science Department is conducting workshops, training programs to create awareness on latest technologies, computer applications and suitable solutions for various issues in the field of Emerging Technologies in Computer Science.

## About FDP:

This FDP aims to build a strong theoretical foundation in Artificial Intelligence and Machine Learning, with a focus on practical applications using MATLAB. This FDP addresses cutting-edge challenges in the field, equipping participants with in-depth knowledge and hands-on skills. By introducing recent advancements and best practices, the program seeks to enhance the quality of education in institutions by integrating these developments into academic curricula.

## Resource Persons:

**1. Mr. J. Prem Kumar**

Product Manager for MathWorks, ARKANC Technologies Private Limited Hyderabad.

**2. Dr. G. Amjad Khan**
Associate professor of ECE, GPREC, Kurnool.

**3. Dr. M. Abid Nayeemuddin**
Associate professor of ECS GPREC, Kurnool

## Topics to be covered:

- ❖ Introduction to Machine Learning
- ❖ Introduction to MATLAB
- ❖ Introduction to Simulink
- ❖ Feature Extraction for Machine Learning
- ❖ Challenges in Feature Extraction in Machine Learning
- ❖ Supervised Learning and Unsupervised Learning
- ❖ Architecture of CNN (CNN)
- ❖ Designing CNN from Scratch
- ❖ CNN Design and Training with Deep Network Designer App
- ❖ MATLAB Support to Open-Sourced Pre-Trained Models
- ❖ Adding, Importing Pre-Trained Models into MATLAB and its Applications
- ❖ Importing TensorFlow Models into MATLAB
- ❖ Using MATLAB with Python for Deep Learning
- ❖ Introduction to RL
- ❖ Working of Reinforcement Learning

## CHIEF PATRON:
Sri. P. Subba Reddy
Chairman, GPREC, Kurnool.

## PATRON:
Dr. B. Sreenivasa Reddy,
Principal, GPREC, Kurnool.

## CO-PATRONS:
1. Dr. R. Praveen Sam
   Prof. & HOD of ECS,
   GPREC, Kurnool.
2. Dr. S. Nagaraja Rao
   Prof. & HOD of ECE,
   GPREC, Kurnool.
3. Dr. T. Brahmananda Reddy
   Prof. & Dean of R &D Cell,
   GPREC, Kurnool.

## CONVENERS:
1. Dr. M. Abid Nayeemuddin
Associate Professor of ECS
☏ 9393930904

2. Dr. G. Amjad Khan
Associate Professor of ECE
☏ 9912555105

## CO-CONVENERS:
1. Sri. P. Praneel Kumar
Assistant Professor of ECS
☏ 8500261111
2. Sri. B. Sreedhar
Assistant Professor of ECS
☏ 9494939743

## ADVISORY COMMITTEE:

Dr. Y. Rama Mohan, Associate Professor & Assoc HOD of ECS
Dr. K. Suresh Reddy, Professor & Associate HOD of ECE
Dr. K. Govardhan Reddy, Professor of ECS
Dr. G. Raghu Ram, Associate Prof. of ECS
Dr. A.Vishnu Vardhan, Associate Prof. of ECS
Sri. K. Srikanth, Associate Prof. of ECS

## ORGANIZING COMMITTEE:
All the Faculty members of ECS & ECE Department
**Target Audience:** For Faculty & Research Scholars
**Registration fee: FREE**
- **Limited to 40 seats only**
- **Certificate will be given to all active participants whose attendance & Test score is more than 80%**

**Last date for registration: 25th Nov, 2024**
**Registration Link:**

https://bit.ly/fdpgprec

**WhatsApp Link:**
https://chat.whatsapp.com/IrHGMxEQR26F6p03lOnRZ8