

# **Joginpally B.R. Engineering College**

**UGC AUTONOMOUS** 

Organized By
Department Of ECE & EEE
In Collaboration with



### **EKALAVYA PROJECTS**

One Week Online Faculty
Development Programme (FDP)

on

Advances in Embedded Systems, RTOS, and AIoT for Next-Generation
Applications

Time: 7:00 PM to 8:30 PM

Date: 10, Nov 2025 to 14, Nov 2025



www.jbrec.edu.in

#### About:

The integration of Artificial Intelligence (AI) with the Internet of Things (IoT) has given rise to AIoT, enabling devices to not only sense and connect but also analyze, learn, and make intelligent decisions in real time. This FDP session explores how embedded systems are being transformed with AIoT technologies, focusing on edge intelligence, low-power hardware platforms, and secure data-driven solutions. Participants will gain insights into the design and implementation of AI-enabled IoT devices, covering both hardware and software aspects. The session aims to equip faculty and researchers with the knowledge to adopt AIoT in next-generation innovations.

### **Objective:**

This session aims to introduce participants to the convergence of Artificial Intelligence and IoT in embedded systems. It will provide insights into edge intelligence, low-power architectures, and hardware-software co-design for AloT applications. Emphasis will be placed on real-time decision-making and secure communication in connected devices. Participants will explore use cases in smart cities, healthcare, automotive, and Industry 4.0. The objective is to equip faculty and researchers with skills to guide AloT-based projects and innovations.



### **About JBREC:**



An admiration in the field of Engineering education, Joginpally B.R.Engineering College, a part of the visionary Sri J.Bhaskaro Rao's accomplishment, observed its inception in the year 2002 with the aim of providing quality professional education and meeting the rising expectations of the student community in Telangana. J.B.R Educational Society has been working relentlessly towards the objective of achieving excellence in the fields of Engineering, Medicine, Management, Hospitality and Information Technology. The college is NAAC A+ accredited and from ECE and EEE are NBA accredited up to 2028.

### About Ekalavya Projects: EKALAVYA

Ekalavya Projects is an initiative from the Ekalavya Innovative Solutions Pvt.Ltd. (ESIPL), established in the year 2019 with a prime motto of imparting quality training in engineering, from a small organization with just a handful of students in the year 2019 in Tirupati, the organization has grown by leaps and bounds and established itself as one of the leading EdTech company in Andhra Pradesh. We provide innovative engineering skill development solutions for engineering students and who are interested to learn advanced technologies in various domains like VLSI, EMBEDDED, AI, IoT, PYTHON, and JAVA, etc.

#### Convenor:

Dr. B Abdul Raheem, Professor & HoD ECE.

#### **Co-Convenor:**

Dr. Ch Rami Reddy, HoD EEE.

### **Coordinators:**

Mr. M. Govindu, Assoc. Professor, ECE Mr. G. Naveen Assoc. Professor, ECE

#### What content we Delivered:

- Foundations of Embedded Systems and AloT
- Embedded Hardware and Software Platforms
- Artificial Intelligence and Data Analytics on the Edge
- IoT communication technologies: BLE, ZigBee, LoRa, NB-IoT, 5G/6G
- Protocols and standards: MQTT, CoAP, HTTP
- RTOS in Safety-Critical Systems (Automotive, Medical, Aerospace)
- RTOS and IoT Edge Devices
- RTOS vs Embedded Linux: When to choose what?
- Security Issues in RTOS-based Embedded Systems
- Future Trends: RTOS in AloT, 5G, and Edge Computing
- Security, Privacy, and Trust in AloT Systems
- Case Studies, Industrial Applications, and Research Opportunities.

### **Mode of FDP's:**

Through Online with Live Instructor

### **Essentials for FDP's:**

- Desktop / Laptop / Smartphone
- Speed Internet Connection

### **Eligibility:**

 Faculty, Industry Persons, Research Scholars, and PG Scholars.

### **Resource Persons:**

Name: Mr. P V Sarath Senior SW Engineer.

Name: Ms. Navya

Embedded software engineer

## **How to Apply:**

- Interested persons are informed to fill the Registration form on are before 25 Oct 2025 through the link given below:
- Linkhttps://forms.gle/m3MrxTLcxDiqPFH
   GA
- Upload the College Id card / Employee Id card & Payment Receipt.

## **Benefits for Participants:**

- Soft copy of Materials
- Earn Certificate

### Note:

- · Hurry Up! Limited seats are only
- Before submitting Registration form once verify details.

### **Contact Us:**

G. Santhosh Kumar Ph No. +91 9959 4087 16

E-Mail: info@ekalavyagroupoftechnologies.com

#### Fee:

- Per person INR. 300/- including all tax's
- ( Payment should be done through digital mode only - NEFT / Phone Pe / Google Pay )

### **Bank Details:**

• Bank Name: YES Bank,

• Acc./No: 048585800004679

• IFSC Code: YESB0000485,

• Branch Name: Tirupati.



### For more detalis visit:

Ekalavya Projects
Visit: www.ekalavyaprojects.in

## **For Registrations**



Thank you !!...