## **Embedded System for IoT Topics 2022**

- IoT and Machine learning based recognition of plant diseases by leaf image classification
- Soil NPK detection based on Colour sensor using IoT and Machine learning algorithm
- Design IoT Mesh Enabled Environment Monitoring Device
- Smart Home Security System with Automatic Phone Calling System
- IoT Based Smart Waste Management System for Smart City
- Deep Learning Techniques for Obstacle Detection and Avoidance in Driverless Cars
- Rapid Embedded Systems Design& Prototyping
- IoT enabled ECG signatures of physiological anxiety
- IoT enabled correction of asymmetrical gait patterns
- Creating trusted ecosystem and mutual authentication in IoT environment
- A novel IOT Enabled Health Diagnosis and Monitoring Model using Machine Learning
- Smart street lighting with air quality measurement

#### **Iot Enablers** Volume Deep Learning Applications Cloud System Bluetooth Π nabling RFID Transceive lec ZigBee polog Data Analytics

September 2022



## **RV COLLEGE OF ENGINEERING**

(Autonomous Institution affiliated to Visvesvaraya Technological University, Belagavi)

R V Vidyanikethan Post, Mysuru Road, Bangaluru-560059

## Internship under CISCO-RVCE CoE in IoT By 'Embedded Systems for IoT' Team









#### **Team Members**

Dr. K.V. Padmaja, EIE dept Dr. Uma B.V., ECE dept. Dr.Govindaraju M. ECE Dept. Mr. Praveen S., ECE dept

Mr. RajithkumarB.K. ECE dept. Dr. Rajasree PM, EIE dept, Dr.Mamatha G.S ISE dept, Ms. Priya D, ISE dept

Go, change the world

# Centre of Excellence in IoT

The CoE is a joint initiative between Cisco and R V College of Engineering, Bengaluru, to set up an environment that would empower young minds through knowledge and training for enhancing employability, research and innovation in emerging field of Internet of Things (IoT).

# **Objectives**

- Building technical capability and improving employability among students and fresh graduates
- Train mid-career executives in private and government sectors on potential for technology led transformation in their sectors /Industries
- Support incubation of start-ups focused on internet technologies.

# **Embedded Systems for IoT**

This training Program Emphasis on understanding of the:

- Sensors and Actuators.
- Embedded Processors & Programming Languages.
- Optimization and Security.
- Connectivity to IOT platform and analysis.

# **Highlights of Internship Programs**

- Practice work would be more than conceptual knowledge
- Customized projects would be designed based on application in areas chosen
- Knowledge and skill development Training programs are open to engineering students of Karnataka
- This certificate programs would run for 4 weeks
- Each program will have pre-requisite
- Onsite / Remote learning efforts would be initiated

#### Virtual Internship for Embedded Systems for IoT (5th September to 5th October 2021) 7 Projects

1) IoT assisted Sleep Apnea Monitoring and Assessment

2) IoT enabled Chronic Obstructive Pulmonary Disease Monitoring and Assessment

3) IoT and Machine learning based recognition of plant diseases by leaf image classification.

- 4) Soil NPK detection based on Colour sensor using IoT and Machine Learning5) Maintenance and Monitoring system for home office and manufacturing floors
- 6) IOT based Early Flood Detection and Alarms
- 7) AI enabled Soil Water Need Analyzer and Resource Planner for Agriculture Productivity and Quality Enhancement

### **62 Students**

• Students of all Engineering colleges in and around Karnataka has taken part in this program.



31 Project Reports

