

General Instructions

- ◆ This faculty development program mainly focus on providing hands-on training to the participants on the development boards to implement IoT based projects
- ◆ Participants should bring their own laptop with latest OS.
- ◆ Free accommodation will be provided to outstation participants on request (Restricted to 30 on first come first serve basis)

Registration

- ◆ **Registration Fee: Rs. 2,500/-** per Participant (Includes refreshment, lunch, take away hardware kit, training materials and certificate)
- ◆ Hardware kit includes Node MCU ESP8266, sensors, motors, drivers and other accessories.
- ◆ Online registration can be made with the payment details and scanned copy of the official ID card through the link:
<https://sites.google.com/view/iotrit/fdp-on-iot>
- ◆ Payments can be made either through NEFT or DD drawn in favour of "Rajalakshmi Institute of Technology" payable at Chennai.

Chief Patrons:

Thiru. S. Meganathan

Chairman, Rajalakshmi Institutions

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Rajalakshmi Institute of Technology

Convener:

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Professor, ECE

Coordinators:

Mr.T.K. Senthil Kumar

Assistant Professor (SS), ECE

Mr. K. Siva Kumar

Assistant Professor (SS), ECE

Address for Communication

The Coordinators,

Three Days FDP on IoT for Industrial Applications

Rajalakshmi Institute of Technology
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For more information and updates on the event, please refer the following link:

<https://sites.google.com/view/iotrit/>

Three Days Faculty Development Program on Internet of Things (IoT) for Industrial Applications

07.12.2017 - 09.12.2017



Organized by



RAJALAKSHMI
INSTITUTE OF TECHNOLOGY

Centre for Internet of Things (CIoT)
Rajalakshmi Institute of Technology

Kuthambakkam, Chennai-600 124

www.ritchennai.org

In Association with



About the Institution

Rajalakshmi Institute of Technology started in the year 2008, under the aegis of Sabari Foundation. This institute has been instrumental in establishing a distinct role in the field of quality driven engineering education. This has been possible due to the presence of leading academicians along with technology professionals of international and national repute, inducted within its governing body. The presence of senior, experienced and qualified faculty members, under the direction of the governing council have paved the way for establishing RIT as a distinct identity of Technological Institute of Eminence. Rajalakshmi Institute of Technology is approved by All India Council for Technical Education, New Delhi and affiliated to Anna University, Chennai. The college offers five B.E/B.Tech degree programmes in CSE/ECE/EEE/MECH &IT. This institute is certified by the ISO 9001:2008 for academic standards and the UG programs, CSE and MECH are accredited by NBA.

About Centre for Internet of Things

The objective of this centre for IoT is to impart working knowledge in Internet of Things to all our students and to train them at par with the requirement of the nation to become technocrats as well as entrepreneurs in IoT technology. Students are motivated to implement their innovative ideas into a prototype using embedded development boards and process the data collected from various sensors in the cloud for automation. Periodically, renowned experts from industry and academia will be invited to present on emerging trends in IoT.

About the Program

This Faculty development program focus on training the participants to use the development boards for the implementation of IoT based industrial automation applications.

Course Content

Day 1: Introduction & Getting Started with Arduino

Session 1:

Introduction to Embedded System
Embedded Systems in IoT
ESP8266, Node MCU
Node MCU Configuration

Session 2:

Working with digital pins
♦ Interfacing and configuration of LED, Buzzer and switches
Working with analog pins
♦ Configuring ADC, potentiometers, serial communication, I2C interface for display

Day 2: Node MCU, Sensor, Actuator and Communication module interfacing

Session 1:

Node MCU Configuration
Sensors and actuators interfacing
♦ Moisture, Light, Flame, Temperature & Humidity, IR, PIR, Gas, Piezo Vibration, and Sound sensors, 3 axis accelerometer
♦ Actuators, GPS/GSM interfacing with Node MCU.

Web server using Node MCU

♦ HTML basics, HTTP protocol concepts
♦ Configuring Node MCU as local web server
♦ Server / Client model configuration
♦ Analyzing sensor data and controlling actuators using HTTP protocol remotely

Session 2:

Cloud interfacing with Node MCU
Used cases - Social media
♦ SMS, Telegram, email, twitter using cloud services

Day 3:

Session 1:

Implementation of their innovative ideas

Session 2:

Demonstration of their Project to the Juries

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Registration Form

Name of the faculty :

Department :

Total Experience :

Area of Interest :

Institution :

Communication Address :

Mobile Number :

E-mail :

Is accommodation required?: Yes / No

Payment Details

DD/Transaction Number :

Date..... Amount Rs.....

Name of the
Bank.....

Declaration

The given information is true to the best of my knowledge. If selected, I shall attend the program.

Place:

Date: Signature of the faculty

Signature of the Head of the Department/
Institution