#### About the event:

Summer Internship Program is a 5 days blended mode training organized by the Department of Embedded Technology (DET), School of Electronics Engineering, Vellore Institute of Technology for the students to enhance their skills in current trends with hands on session relating to IoT open source tools, Cloud, hardware modules and related concepts. This internship features talks along with hands on experience by Industry Experts and faculty members. The target audiences are Undergraduate, Postgraduate students, and research scholars.

## **Tasks Scheduled:**

- Industry experts will pitch Problem Statements, setting platform for Interns to develop Innovative IoT solutions during Internship. Solutions will be evaluated by experts.
- Best innovative solution will be rewarded.
- Dive into the Virtual Realm Leveraging the open source Things Network platform for innovative IoT use cases.
- Hands on Session to develop Intelligent IoT Solutions.
- AWS IoT, AWS glue framework for Data Quality Management, Importance of DQ management, Implementation of DQ frameworks.
- Sustainable smart city solution Unleashing the power of IoT- LoRAWAN.
- Temperature and Humidity data monitoring using Webserver.
- Device control using Bluetooth device and data accessing using HTTP.
- Sensor interfacing with WDM. Data control and monitoring in cloud using WDM.
- Device control and monitoring using mobile application.
- Edge Analytics using AI and ML.

Mode: Blended (Weekends only)\* Online Platform – Microsoft Teams Offline Venue: PRP 108 (Intelligent Industrial IoT & Computing lab) Time: 09:00 AM to 5:00 PM.

#### **Advisory Committee:**

**Dr. Sivanantham S** Professor and Dean, School of Electronics Engineering (SENSE), Vellore Institute of Technology, Vellore, India.

Dr. B. Karthikeyan

Associate Professor and Head, Department of Embedded Technology, SENSE, VIT Vellore.

#### **Coordinators**

**Dr. K.C. Sriharipriya**, Associate Professor. **Dr. R. Sujatha**, Associate Professor Senior.

School of Electronics Engineering, Vellore Institute of Technology, Vellore. Contact :+919865733011 / +918610045822 Mail: sriharipriya.kc@vit.ac.in sujatha.r@vit.ac.in

## **Resource Persons:**

Dr. R. Sujatha, VIT Vellore.
Dr. K.C. Sriharipriya, VIT, Vellore.
Mr. Kanaga Chidambaram, Founder, Eazythings
Technology private limited.
Ms. Deepika Pai, Senior Software Engineer, Square,
San Francisco Bay Area, CA, USA.
Ms. Sejal Mittal, AWS Trainer, AWS.
Dr. B. Nagajayanthi, VIT, Chennai.
Dr. Subramaniam, Technical Head, Enthu
Technologies, Coimbatore.

## Registration fee: Rs. 500/-

Registration Link: <u>https://events.vit.ac.in/</u> Last Date for registration: 05<sup>th</sup> May 2024







# 5 days Summer InternshipProgram on

# Developing Cloud Based Intelligent Edge Powered IoT Solutions 11<sup>th</sup> - 26<sup>th</sup> May, 2024\* Weekends only

Organized by Department of Embedded Technology School of Electronics Engineering

> Vellore Institute of Technology, Vellore. Tamil Nadu, India.

# **Summer Internship Schedule**

**Industry experts will pitch problem statements, setting a platform for Interns to develop innovative solutions during the internship program, mentored by faculty experts.** Solutions will be evaluated by both industry and academic experts. **Best innovative solution will be rewarded.** 

S. No	Date	Session 1 (09:00AM -01:00PM)	Session 2 (02:00PM - 05:00PM)
1	11/05/24 (Saturday) Online	Resource Person: Dr. R. Sujatha. Associate Professor Senior, VIT, Vellore. Title: Sustainable smart city solution – Unleashing the power of IoT- LoRAWAN.	Resource Person: Ms. Deepika Pai Senior Software Engineer, Square San Francisco, Bay Area, CA, USA. Title: Edge Analytics using AI and ML.
2	12/05/24 (Sunday) Offline	<ul> <li>Resource Person: Dr. Subramaniam, Technical Head, Enthu Technologies, Coimbatore.</li> <li>Offline: Venue: PRP 108 (Intelligent Industrial IoT &amp; Computing lab), VIT, Vellore.</li> <li>Device control using Bluetooth device and data accessing using HTTP, Temperature and Humidity data monitoring using Webserver, Sensors interfacing with WDM, Data control and monitoring in the cloud using WDM, Device control and monitoring using Mobile application. Project Allotment: Industry experts will pitch problem statements, setting a platform for Interns to develop Innovative IoT solutions.</li> </ul>	
3	18/05/24 (Saturday) Online	Resource Person: Ms. Sejal Mittal Data Engineer, AWS, Bengaluru. Title: AWS IoT, AWS glue framework for Data Quality management	Resource Person: Ms. Sejal Mittal. Data Engineer, AWS, Bengaluru. Title: Importance of DQ management in today's world, Implementation of Data Quality frameworks.
4	19/05/24 (Sunday) Online	Resource Person : Dr. K.C. Sriharipriya Associate Professor, VIT, Vellore. Title: Leveraging open source platform for IoT use cases.	Resource Person:Dr. B. NagajayanthiAssociate Professor, VIT, ChennaiTitle:Dive into the Virtual Realm – TechnicalExpedition in open source IoT simulators.
5	25/05/24 (Saturday) Hybrid – offline/Online	Resource Person: Mr. Kanaga Chidambaram, Founder, EazyThings Technology Private Limited.Hybrid Mode (participants may decide the mode – online/offline): PRP 108, VIT, Vellore.Title: Hands on session to develop Intelligent IoT solutions.Project execution and evaluation with help of Industry and Academic Experts.	