

Department: IT | Date: 22<sup>nd</sup> - 27<sup>th</sup> March, 2021

**A One Week Workshop on "Internet of Things (IoT)"**

A One Week Workshop on "Internet of Things (IoT)" in Association with Andhra Pradesh State Skill Development Corporation (APSSDC) from 22<sup>nd</sup> - 27<sup>th</sup> March, 2021. A total of 70 participants from II B.Tech II Sem have participated in the workshop. Dr. K. K. Baseer, Associate Professor and Mr. P. Bhasha, Assistant Professor organized this workshop under the guidance of Dr. K. Ramani, Professor and Head, Department of Information Technology.

**Resource persons:**

- 1. Mr. B. Nagaraju**, Technical Skill Trainer, APSSDC.
- 2. Mr. U. Sumanth**, Technical Skill Trainer, APSSDC.
- 3. Mr. B. Suresh**, Technical Skill Trainer, APSSDC.

**Targeted Group:** II B. Tech, II Semester students of IT.

**DAY-1: 22<sup>nd</sup> March, 2021**

**Mr. B. Nagaraju**, Technical Skill Trainer, delivered a lecture on Introduction to IoT and How to utilize the Softwares.

**Mr. U. Sumanth**, Technical Skill Trainers delivered a lecture on Led ON and OFF basic programming, Led fading programming, LED controlling with character and string, Led controlling with potentiometer.

**DAY-2: 23<sup>rd</sup> March, 2021**

Resource Persons delivered lectures with hands-on sessions on the topics: Controlling RGB led with string, Introduction to sensors - LDR sensor, IR sensor, seven segment display, Servo motor, Door locking system with servo motor.



## DAY-3: 24<sup>th</sup> March, 2021

Resource Persons delivered lectures with hands-on sessions on the topics: Temperature sensor, Ultrasonic sensor, LCD interfacing, keypad interfacing, RGB, LED with Bluetooth app. Introduction to IOT, What is Raspberry pi, Real world applications with Raspberry Pi, Different IoT platforms, Arduino Vs Raspberry Pi, Raspberry Pi 3 Model B V1.2 Board description, Different operating systems used for Pi, Jesse and stretch OS Installation, SSH and VNC connection, Linux and Python basics, Interfacing LED with Pi using python, Controlling of LED using switch through Pi.

## Day-4: 25<sup>th</sup> March, 2021

Resource Persons delivered lectures with hands-on sessions on the topics: Interfacing Sensors (IR, DHT11) with Pi, Using Socket Communication how to Send and Receive data, Controlling of Hardware and observing status of actuators by using Socket.

## Day-5: 26<sup>th</sup> March, 2021

Resource Persons delivered lectures with hands-on sessions on the topics: Different Services provided by Amazon Web Services (AWS), How to create and use EC2 instance of Windows and Linux server, Socket communication by using above Instance to control Hardware from anywhere.

## Day-6: 27<sup>th</sup> March, 2021

Resource Persons delivered lectures with hands-on sessions on the topics: AWS IoT Thing Registration, Different Services provided by AWS IoT, MQTT protocol with Python using AWS IoT Python SDK, HTTP protocol using AWS, Sample Project which consists all above topics.



The programme ended with a vote of thanks proposed by Dr. K. K. Baseer, Associate Professor of IT, Sree Vidyanikethan Engineering College.

**PHOTO GALLERY**



**Mr. B. Suresh, Technical Skill Trainer, APSSDC, deliver the lecture.**





Group Photo with HoD-IT, Resource Persons, Program Coordinator and Participant

K. Ratna

**HEAD**

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