

## GUJARAT TECHNOLOGICAL UNIVERSITY

### GRADUATE SCHOOL OF ENGINEERING AND TECHNOLOGY

#### EXPERT SESSION REPORT:

**Title:** “IoT Practical Examples to Interact with Physical World”

**Event date:** 8<sup>th</sup> January 2022, Saturday

**Venue:** Online Mode (Google Meet)

**Attendees:** PG Students of GTU-GSET.

**Time:** 3:00 PM to 4:30 PM

**Coordinator:** Prof. Seema B. Joshi, Assistant Professor (Cyber Security), GTU-GSET.

**Objective:** An expert session on “IoT Practical Examples to Interact with Physical World” was organized on 8th January 2022 as part of Skill Enhancement Program Series (AY 2021-22). The invited speaker Mr. Abhishek Kumar Srivastava, Sr. Solution Architect at Exaleap Semiconductors at Bengaluru had shared his expertise on IoT and its hand-on practices during the session. The main objective was to experience the IoT practical examples through various hands-on practices.

**Topics Covered:** Mr. Abhishek Kumar Srivastava gave a very simple and thought-provoking lecture on the subject of IoT Practical Applications. He explained a smart irrigation system and how it can be implemented in real life. There are so many controllers (raspberry pi), communication protocols like (SPI, I2C) and sensors are used to implement this system in the real world. This system is helpful to our farmers through which prediction and analysis of farm data is possible. He has also explained about smart homes (home automation systems) and smart kitchens. He said that so many industries use the MQTT protocol. The live data update on ThingSpeak Cloud was represented along with its working.

#### Outcomes:

- Students got a clear idea about the various IoT based communication protocols and its utilization on different applications.
- Students were able to evaluate the real-world life experiences to the insight and perspective of the IoT industry.
- This session gave students the opportunity to learn something new and all were able to drive such concepts that can be explored for research.

REC Abhishek Kumar Srivastava is presenting

Refrigerator Inventory

- + Lettuce
- + Tomatoes
- + Orange Juice
- + Eggs

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3:20 PM | Expert Session on "IoT Practical Examples to Inte...

Abhishek Kumar, Jyoti Singh, Precius Wallace, Bhumi Patel, Maresh Parmar, Niharika Bhatav..., Kishan Kachhad..., patel pinal, Gangadiya Hars..., jay patel, 12 others, You

REC Abhishek Kumar Srivastava is presenting

### The Internet of Things Ecosystem

Remote

Analytics Data Storage

Internet Network

Gateway

IoT Devices

BI INTELLIGENCE

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3:30 PM | Expert Session on "IoT Practical Examples to Inte...

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