Sarvajanik University

Sarvajanik College of Engineering & Technology
Information Technology Department

Report of Expert Talk on "IOT and its Application" held at IT Dept, SCET on 27th July, 2021

Internet of Things (IOT) describes the network of physical objects. "Things" that are embedded with sensors, actuators, software and other technologies for the purpose of connecting and exchanging data with other devices and systems over the Internet. Things have evolved due to the convergence of multiple technologies, real-time analytics, machine learning, ubiquitous computing, commodity sensors, and embedded systems.

Traditional fields of embedded systems, wireless sensor networks, control systems, automation (including home and building automation), and others all contribute to enabling the Internet of things. In the consumer market, IOT technology is most synonymous with products pertaining to the concept of the "smart home", including devices and appliances (such as lighting fixtures, thermostats, home security systems and cameras, and other home appliances) that support one or more common ecosystems, and can be controlled via devices associated with that ecosystem, such as smartphones and smart speakers. IOT can also be used in healthcare systems, Agriculture Systems, Industry automation, transportation, mega stores etc.

Speaker	**:**	**Dr. Sharnil Pandya,** Associate Professor, CSIT & Dept. of AI ML, Symbiosis Institute of Technology, Symbiosis International University, Pune.
Topic	**:**	IOT and its Application
Date & Time	**:**	27th July 2021 (9:30 AM – 11:30 AM)
Venue	**:**	Online (BigblueButton)
Coordinator	**:**	Prof. Hiren H. Vavaiya
Targeted Audience	**:**	Students from IT/CO
Participants	**:**	**75+** students and faculty members

The session started with "Introduction to Internet of Things" followed by discussion on following concepts:

· IOT and M2M, IOT and Web of Things

· IOT usage in Home Automation, Agriculture

· IOT usage in Healthcare Systems

· IOT usage in Environmental related Issues

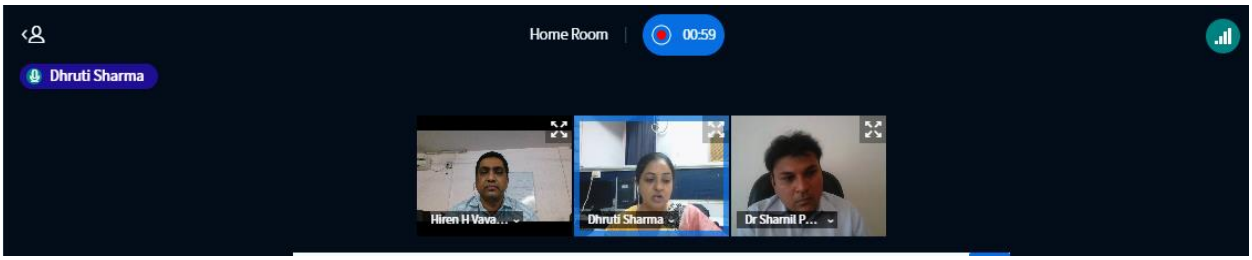
· Various IOT Applications

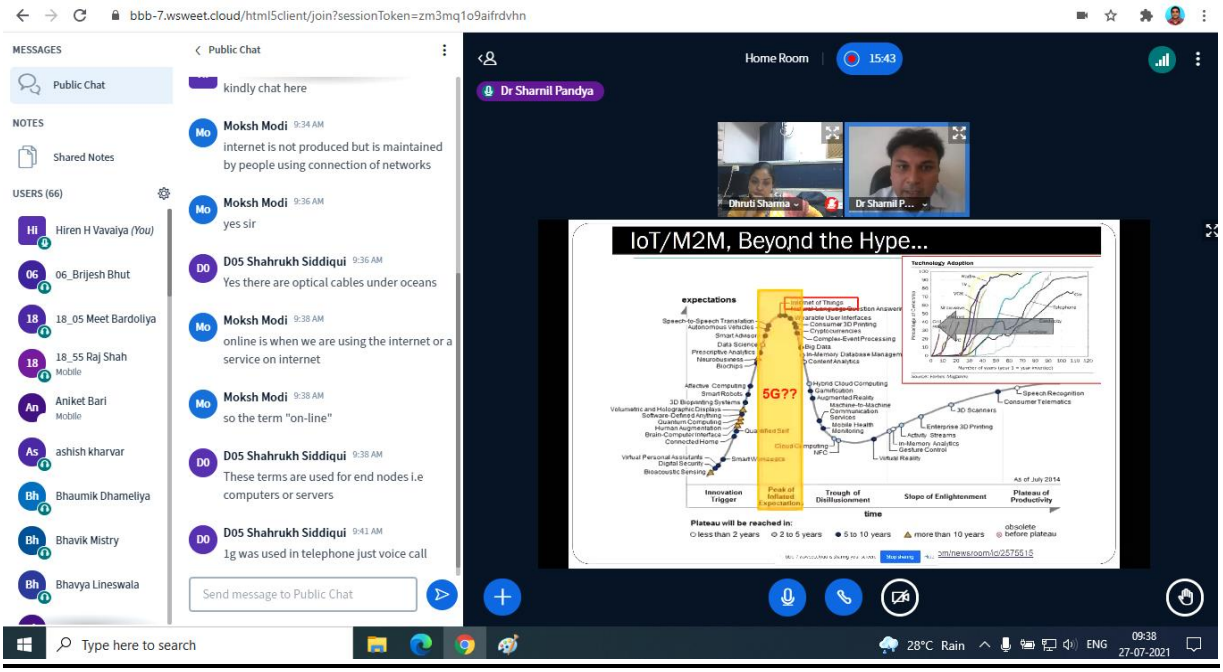
· Storing and using IOT Data on Cloud

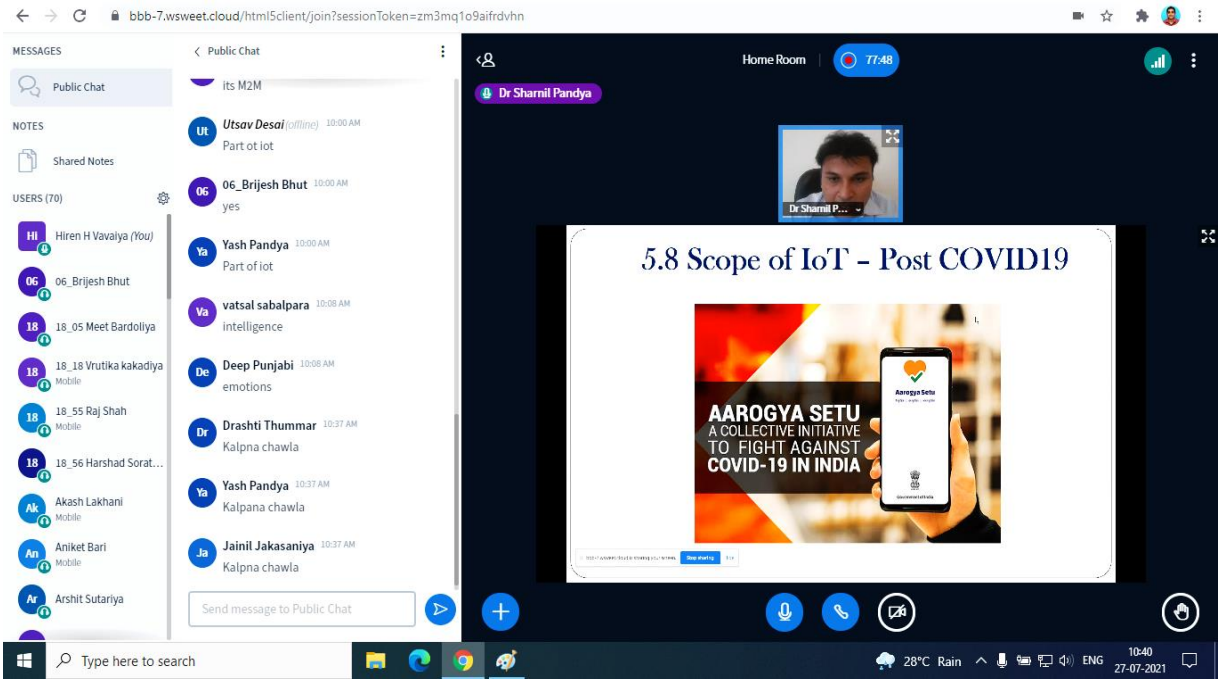
Finally, there was a question-answer session where queries from students were attended by **Prof Sharnil Pandya**. The session ended with a Vote of Thanks by **Prof. Hiren H. Vavaiya.**

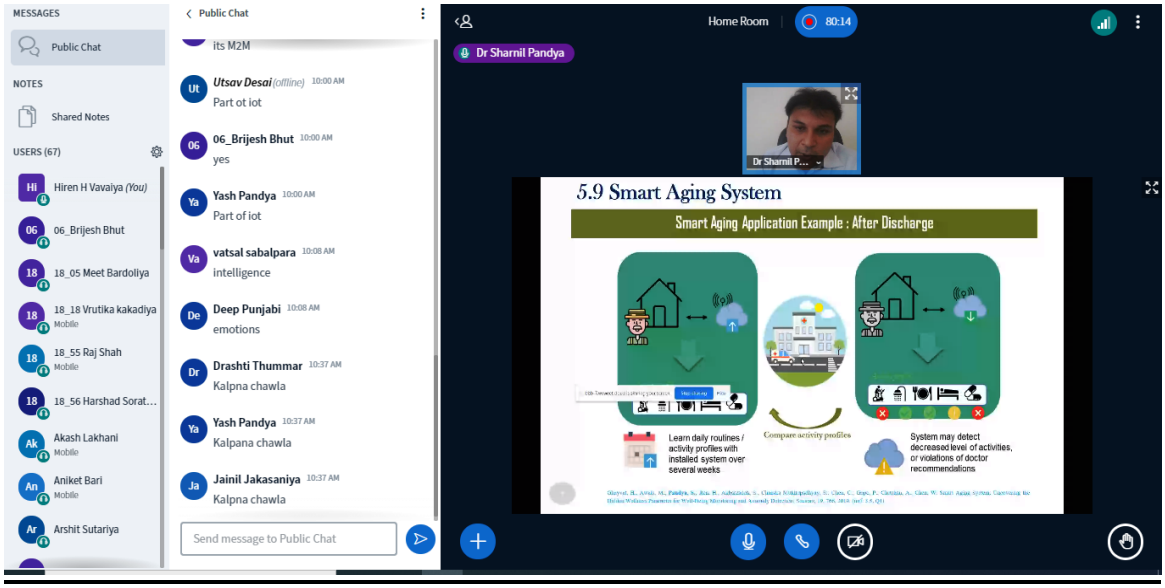
We are grateful to **Dr. Mita Parikh, HOD, IT Dept** for her guidance and co-operation in arranging the expert talk. We also extend our gratitude towards **Dr. Chirag Paunwala, Dean R&D** and **Dr. Hiren Patel, Principal, SCET** for encouraging staff members to organize such an event.

Glimpses of the Event








MESSAGES
Public Chat
NOTES
Shared Notes
USERS (67)
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06_Brijesh Bhut
18_05 Meet Bardoliya
18_18 Vrutika kakadiya
18_55 Raj Shah
18_56 Harshad Sorat...
Akash Lakhani
Aniket Bari
Arshit Sutariya
Public Chat
its M2M
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Yash Pandya 10:00 AM
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vatsal sabalpara 10:08 AM
intelligence
Deep Punjabi 10:08 AM
emotions
Drashti Thummar 10:37 AM
Kalpna chawla
Yash Pandya 10:37 AM
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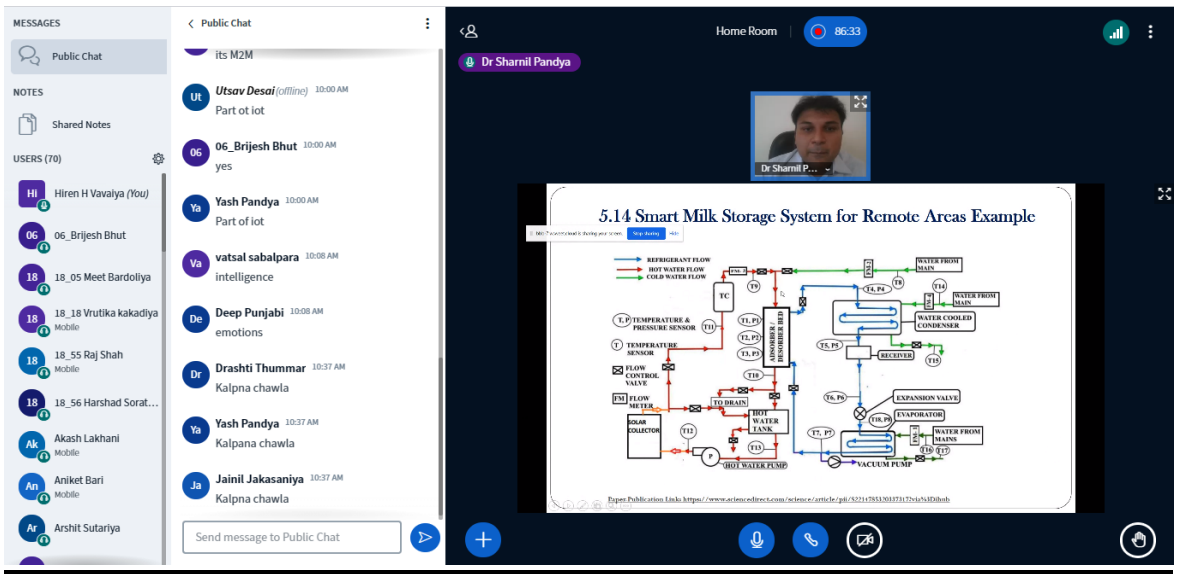
Jainil Jakasaniya 10:37 AM
Kalpna chawla
Send message to Public Chat
Home Room
80:14
Dr Sharnil Pandya
5.9 Smart Aging System
Smart Aging Application Example : After Discharge
Learn daily routines / activity profiles with installed system over several weeks
Compare activity profiles
System may detect decreased level of activities, or violations of doctor recommendations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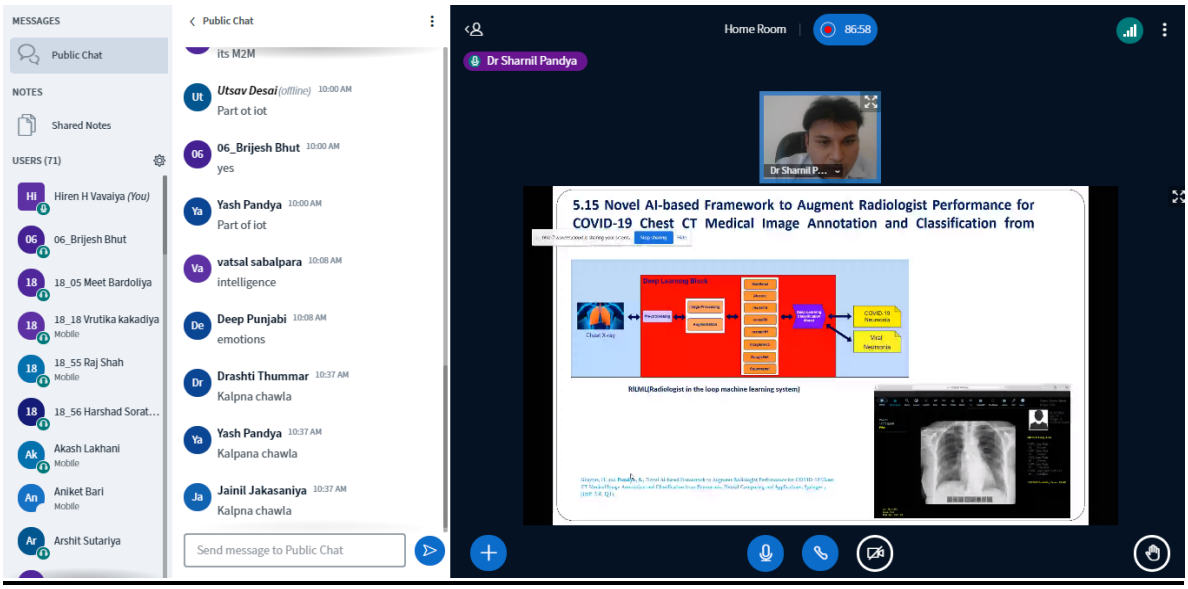
Home Room
86:33
Dr Sharnil Pandya
5.14 Smart Milk Storage System for Remote Areas Example
REFRIGERANT FLOW
HOT WATER FLOW
COLD WATER FLOW
TEMPERATURE & PRESSURE SENSOR
TEMPERATURE SENSOR
FLOW CONTROL VALVE
FLOW METER
SOLAR COLLECTOR
TO DRAIN
HOT WATER TANK
HOT WATER PUMP
WATER FROM MAIN
WATER COOLED CONDENSER
RECEIVER
EXPANSION VALVE
EVAPORATOR
VACUUM PUMP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86:58
Dr Sharnil Pandya
5.15 Novel AI-based Framework to Augment Radiologist Performance for COVID-19 Chest CT Medical Image Annotation and Classification from
Deep Learning Block
RILML(Radiologist in the loop machine learning system)