

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

The poster is for an expert talk event. At the top left is the Sarvajanik University logo with the tagline 'INCLUSIVE | INTEGRATED | INNOVATIVE'. At the top right is the Sarvajanik Education Society logo. The main text reads: 'Sarvajanik College of Engineering and Technology Information Technology Department Organizes an Expert Talk On "IOT and Its Application"'. Below this, a yellow box contains the date 'Date: 27th July, 2021' and timing 'Timing : 09:30 am to 11:30 am'. Another yellow box contains the registration URL 'Registration Url : https://tinyurl.com/nex63zu8' and the last date of registration 'Last date of Reg: 26th July, 2021'. To the right, a circular portrait of Dr. Sharnil Pandya is shown next to his name and title: 'Dr. Sharnil Pandya, Associate Professor, CSIT & Dept. of Artificial Intelligence & Machine Learning, Symbiosis Institute of Technology, Symbiosis International University, Pune.' A 'Note' at the bottom left states: 'E-Certificate will be provided to the registered participants only. Google Meet Link will be shared to the registered participants.' At the bottom, four roles are listed: Event Coordinator (Prof. Hiren Vavaiya), Department Head (Dr. Mita Parikh), Dean R & D (Dr. Chirag Paunwala), and Principal (Dr. Hiren Patel).

Sarvajanik University
INCLUSIVE | INTEGRATED | INNOVATIVE

Sarvajanik College of Engineering and Technology
Information Technology Department

Organizes an Expert Talk
On
"IOT and Its Application"

Date: 27th July, 2021
Timing : 09:30 am to 11:30 am

Registration Url :
<https://tinyurl.com/nex63zu8>
Last date of Reg: 26th July, 2021

Dr. Sharnil Pandya
Associate Professor,
CSIT & Dept. of Artificial
Intelligence & Machine Learning,
Symbiosis Institute of Technology,
Symbiosis International University,
Pune.

Note: E-Certificate will be provided to the registered participants only.
Google Meet Link will be shared to the registered participants.

Event Coordinator — **Department Head** — **Dean R & D** — **Principal**

Prof. Hiren Vavaiya
Assistant Professor,
IT Department,
SCET, Surat

Dr. Mita Parikh
Professor & Head,
IT Department,
SCET, Surat

Dr. Chirag Paunwala
Dean R & D,
SCET, Surat

Dr. Hiren Patel
Principal,
SCET, Surat

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	:	27 th 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

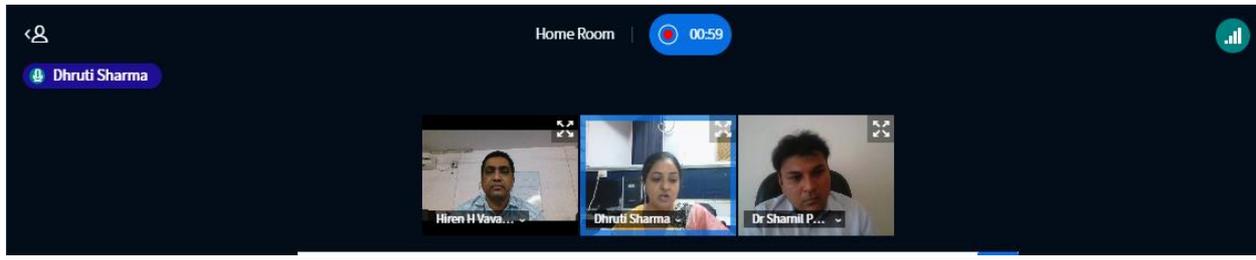
The session started with “Introduction to Internet of Things” followed by discussion on following concepts:

- 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



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MESSAGES

Public Chat

kindly chat here

NOTES

Shared Notes

USERS (66)

- Hiren H Vavaiya (You)
- 06_Brijesh Bhut
- 18_05 Meet Bardoliya
- 18_55 Raj Shah (Mobile)
- Aniket Bari (Mobile)
- ashish kharvar
- Bhaumik Dhameliya
- Bhavik Mistry
- Bhavya Lineswala

Home Room 15:43

Dr Sharnil Pandya

IoT/M2M, Beyond the Hype...

The slide features a central diagram with '5G??' at the top. To the left, under 'expectations', are listed: Speech-to-Speech Translation, Autonomous vehicles, Smart Homes, Data Science, Prescriptive Analytics, Human Augmentation, Brain-Computer Interface, Connected Home, Virtual Personal Assistants, Digital Security, and Biometric Sensing. To the right, under 'IoT/M2M', are listed: Smart Robots, 3D Bioprinting Systems, Volumetric and Holographic Displays, Software Defined Networking, Quantum Computing, Smart Cities, Smart Grids, Smart Manufacturing, Smart Agriculture, Smart Transportation, Smart Infrastructure, Smart Energy, Smart Healthcare, Smart Education, Smart Retail, Smart Manufacturing, Smart Agriculture, Smart Transportation, Smart Infrastructure, Smart Energy, Smart Healthcare, Smart Education, Smart Retail. A 'Technology Adoption' graph shows various technologies on a curve. A 'Plateau of Productivity' graph shows the time to reach a plateau for different technologies.

Time: Innovation Trigger, Peak of Inflated Expectations, Trough of Disillusionment, Slope of Enlightenment, Plateau of Productivity.

Plateau will be reached in: 0 less than 2 years, 2 to 5 years, 5 to 10 years, more than 10 years, obsolete @ before plateau.

Type here to search

28°C Rain

09:38 27-07-2021

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MESSAGES

Public Chat

its M2M

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USERS (70)

- Hiren H Vavaiya (You)
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- 18_05 Meet Bardoliya
- 18_18 Vrutika kakadiya (Mobile)
- 18_55 Raj Shah (Mobile)
- 18_56 Harshad Sorat...
- Akash Lakhani (Mobile)
- Aniket Bari (Mobile)
- Arshit Sutariya

Home Room 17:48

Dr Sharnil Pandya

5.8 Scope of IoT - Post COVID19

AAROGYA SETU
A COLLECTIVE INITIATIVE TO FIGHT AGAINST COVID-19 IN INDIA

The slide shows a hand holding a smartphone displaying the Aarogya Setu app interface.

Type here to search

28°C Rain

10:40 27-07-2021

MESSAGES

Public Chat

its M2M

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18_55 Raj Shah

18_56 Harshad Sorat...

Akash Lakhani

Aniket Bari

Arshit Sutariya

Public Chat

its M2M

Ut Utsav Desai (offline) 10:00 AM
Part of iot

06_06_Brijesh Bhut 10:00 AM
yes

Ya Yash Pandya 10:00 AM
Part of iot

Va vatsal sabalpara 10:08 AM
intelligence

De Deep Punjabi 10:08 AM
emotions

Dr Drashti Thummar 10:37 AM
Kalpna chawla

Ya Yash Pandya 10:37 AM
Kalpna chawla

Ja 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

Complete activity profiles

System may detect decreased level of activities, or violations of doctor recommendations

Dr Sharnil P...

MESSAGES

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its M2M

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Ya Yash Pandya 10:37 AM
Kalpna chawla

Ja Jainil Jakasaniya 10:37 AM
Kalpna chawla

Send message to Public Chat

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 SELECTOR

WATER FROM MAIN

WATER FROM MAIN

WATER FROM MAIN

WATER COOLED CONDENSER

RECEIVED

EXPANSION VALVE

EVAPORATOR

WATER FROM MAINS

VACUUM PUMP

Dr Sharnil P...

MESSAGES

Public Chat

its M2M

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Kalpna chawla

Ja Jainil Jakasaniya 10:37 AM
Kalpna chawla

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Home Room 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

Input: Chest X-ray

Process: Deep Learning Model

Output: COVID-19 Annotation, Viral Infection

RIMU (Radiologist in the loop machine learning system)

Dr Sharnil P...