

AIS-IoT Inauguration Report

All India Seminar on Internet of Things: Trends that affects Lives” was organized by The Institute of Engineers (India) Gujarat State Center on Jan 22-23,2016 @ BhaikakaBhavan Ahmedabad GUJARAT-INDIA. It was held in association with NASSCOMM,DeiTy(Dept of Electronics& Information Technology) Govt of India, Center of Excellence in Internet of Things(CoE-IoT). It was supported by various Professional Associations in Gujarat State named CSI, Ahmedabad chapter, ACM Ahmedabad Chapter, IETE Ahmedabad Center, Gujarat Innovation Society and Mobile Monday.

The seminar was inaugurated by Chief Guest Shri K S Vishwanathan Head IoT, NASSCOM. The Guest of honor for the ceremony was Ms. SmritiDagur, President Institute of Electronics &Telecom Engineers(IETE), New Delhi and Prof Bipin Mehta, President Computer Society of India(CSI)

More than 250 Professionals, Academicians and students participated in the Seminar.

Following dignitaries graced the dias during inauguration

- Shri KS Viswanathan, Head IoT, NASSCOM
- ShriBipin Mehta, President, CSI
- Smt. SmritiDagur, President, IETE
- Mr. S J Desai, Chairman, IE(I), GSC
- Mr. Vijay Shah, Chairman, CSI Ahmedabad Chapter
- Mr. Bharat Patel, Convener, AIS-IoT-2016
- Mr. Jaimin Shah, Organizing Secretary, AIS-IoT-2016
- Mr. Bhaumik Shah, Hon. Secretary, ACM Ahmedabad Chapter

Mr. S. J. Desai, Chairman IE (I)GSC, welcomed all Dignitaries, honorable guests and Participants and presided lamp lightings.

Mr. Jaimin Shah, Organizing Secretary, AIS-IoT-2016, introduced all the associations/ professional organizations supporting the seminar.

Mr. Bharat Patel, ConvenerAIS-IoT-2016, introduced about the seminar. He gave statistics and motivation to the team about it. He also threw an insight as to how IoT will change the lives of the people in the coming days and how machine to machine connectivity is important to shape up the dreams of our PM with the two major missions of “Make in India” and “Digital India”

Mr. Vijay Shah, Chairman CSI Ahmedabad Chapter, thrown focus on the agenda for Day-1 and Day-2 (as per Annexure-I). He invited all to give feedback on having startup for IoT.

Smt. SmritiDagur, President IETE, discussed IoT along with Tweet of Things (ToT) and their applications in various areas.

ShriBipin Mehta, President CSI, gave statistics of IoT, business and statistical figures to motivate audience to work in this areas. He also elaborated upon the impact of IoT.

- How do I bring collaboration between academic and industry?
- Foundation skill for industry
 - o Manufacturing area (int. / production/ development)
 - o Mechanical/Electronics Engineering [60 hr.]
 - o Aerospace/Embedded

ShriKS Vishwanathan, **Chief Guest of the function in his inauguration speech highlighted few points**

- Analytics – Predictive sophistication ,Best is yet to come over 150 billion connected devices
- Curricula in academia changes Decade to Decade (D2D) where as Industry demand changes Quarter to Quarter tak (QSQT)
- We need to work hard in IoT to meet requirements, Your capability of business skills applications is important ,Your understanding in all verticals of application areas of IoT such as Retails, Transport, Health Agriculture, AutomationIndustry , Home , Entertainment is important. There will be 75 billion devices by 2020, so moment for all in India to look what we can do in IoT applications. Overall goal is to make all devices intelligent

NASSCOM has started Centre of Excellence in IoT in Bangalore such 6 centers are planned in INDIA. The purpose of such centers are

1. To Increase capacity for IoT in country
 - a. Academic
 - i. Curriculum development
 - ii. IoT Platform
 - iii. 200 institutes to be networked by March 2017
 - b. New skill development and not conventional program/IT platforms
2. Multiple technology intra-operational infrastructure
 - a. Gamut of sensor, communication, network, analytics, cloud, security

- b. Pay per Use model
 - c. All applications as per verticals listed above
 - d. CoE in all verticals of applications
 - e. Six such centers on PPP model
 - i. 50 % share by Government of India
 - ii. 30 % share by State Government
 - iii. 20 % share by Industry /Academia
 - f. Start up India / Stand up India
3. CoE, Bangalore – March 2016
- a. 17 educational institute partnered for it in Karnataka
 - b. Look forward to establish global IoT hub in India
 - c. IoT is the present and future technology

Bhaumik Shah, Hon. Secretary, ACM Ahmedabad Chapter proposed vote of thanks.

Two day extravaganza Technical sessions were as follows with details.

Day 1:

Session1

Speaker 1: Mr. Niraj shah arihant satiate, Ahmedabad

Theme: IOT overview and application delivered by.

MrNirajmade audience aware with the upcoming demands of IOT, area of applications and challenges being faced to implement it. Iot is the buzz word now a day as we can see its explosion in wearable devices, medical sector, textile industry, health and care sector, shopping sectors. IOT has a major challenge of security and interoperability between different protocols.

Speaker 2:Dr. Sanjay chaudhari, professor and head(Reserch) at institute of engineering and technology (IET), Ahmedabad university.

Theme: Enabling application development for internet of things, service and people (IOTSP) delivered

Dr Sanjay very well defined IOT in three words sense- compute-control. For interfacing and control purpose we need to develop Iotapps which very well deals with different kinds of protocols. He also explained different approaches for iot programming. He also made students families with new protocols being developed for IOT and there interoperability with the existing network.

Session2

Speaker 1: Prabhjot Singh Microsoft Azure

Theme: IoT and cloud

MrPrabhjot Singh showed how cloud and IoT can be incorporated with each other. We can access iot database with cloud technology and more computation power can be given to IOT devices and save memory space. He also explained the machine learning technique for adaption along with a practical example of Myntra mobile app.

Day: 2

A talk on Interfacing BLE with Android based Device was delivered by Dr Hemal Shah of Ganpat University where he narrated about Blue tooth Low energy and its communication hardware. He discussed about the protocols and hardware involved for Low energy solutions for IoT devices using BLE as Wireless Architecture for communication. He compared BLE over regular Bluetooth. He also talked about geo-fencing. He has shown Commercial product (BEACON) using BLE and application of the same, configurations of the BEACON and its constituent parts and various ways to access BEACON. Apps related to BLE for mobile.

ShriMadhukant Patel of Reve Automation Gandhinagar demonstrated application of IoT in RTO using Case study and sensors he has developed for the same. By the case study, he has shown importance of sensors use in generating smart technology and its implementation in IoT for smart cities like GIFT city project @ Gandhinagar

On the theme of IoT, the new Lifestyle Mr. Hardik Mer, Aronic Web Solutions Ltd, Ahmedabad illustrated about the Machine Automation using IoT. He highlights about the Wireless Technology, Mobility of Assets, Enterprise and solutions for the same. He has shown the path and solutions, which enhances the new generation life style.

A Special Session on demonstration of Live projects on IoT was held in Day -2 afternoon named as **IoT Challenges**. It was judged by Shri Rajesh Thakker and Mr. Sagar Shah of Mobile Monday Company from Ahmedabad. Three projects were demonstrated

1. Home Automation, Green Clous, Gandhinagar
2. Apple iWatch Demo Applications , YudizSolutions, Gandhinagar
3. Women Safety Mobile Applications, Slicon IT Ahmedabad

All the projects/ products motivated the student participants to develop such innovation applications in the field of IoT. The participants were given trophies for their efforts sponsored by KomolineAerospace Ltd. , Ahmedabad

Survey Papers were presented by students in the paper presentation session. The Session was chaired by Dr K G Maradiaya, Professor, ECE, GEC Gandhinagar and Dr Priyanka Sharma, Professor, Raksha Shakti University. The participants were given certificates for the same.

Valedictory session was chaired by Shri S J Desai, Chairman IEI-GSC, He insisted to work on this theme as right pace has been set by the seminar in this area. Mr. Desai extended his support to conduct such events at Institute level to cover diverse requirement of IoT. Shri Bharat Patel, Convener of the Seminar appreciated the participants and motivated students to work in this field. Mr. Patel also mentioned that NASSCOM is interested in extending hand for development in field of IoT in State of GUJARAT. Dr N P Gajjar, Professor Nirma University gave concluding remarks of the seminar with few recommendations. Dr NileshModi , Chair, ACM Ahmedabad Chapter proposed vote of thanks.

Recommendations:

- The seminar was up to mark to leverage the futuristic pervasive technology on Internet of Things.
- The seminar is in line with nation's development path of Make in India, Digital India and Start Up – Stand Up India campaign
- State of Gujarat can play pivotal role in such development by PPP Model. Professional Associations/Organizations/ Academia/ State Govt should forward proposal jointly for setting up next CoE in IOT under guidance of NASSCOM Bangalore.
- Academia should set up Special Interest Groups (SIG) is IoT with different domains of Hardware/ Software/ Applications/ Management/ Architecture/ Development / Tools & Technology Aspects.
- Some Platform must be provided meanwhile for the startup in this area.
- GESIA / GIS officials may arrange meetings with NASSCOM to bring business on IoT to state of Gujarat by showcasing the ECO System for it.

