Workshop on IOT and Security
March 27-28, 2017
Venue: Department of Computer Science and Engineering
Tezpur University, Napaam, Assam

Organized by:

Department of Computer Science and Engineering Tezpur University, Napaam, Assam

in association with

Department of Computer Science and Engineering, IIT Guwahati, Assam

Nowadays, smart grid, smart homes, smart water networks and intelligent transportation are the new catch terms in our day-to-day life that have connected our world like never before. The common vision of such systems is associated with the concept of "Internet of Things" (IoT), wherein through the use of sensors, the system infrastructure is intertwined with information and communication technologies. Here, with the use of network embedded devices, intelligent monitoring and management can be achieved. These types of sophisticated dynamical systems require devices to be interconnected via distributed sensor networks to transmit useful measurement information and control. With the rapid technological development of sensors, wireless sensor networks (WSNs) has become the key technology for IoT.

With this background, Department of CSE, IIT Guwahati in association with Dept of CSE, Tezpur University is organizing a Workshop on 'IoT and Security ' during March 27-28, 2017. The workshop includes valuable deliberations from the IITG and IIITG experts on the state-of-the-art 802.11 WiFi Networks and Cloud Security along with discussions and exchange of ideas that assures to offer an enlightening platform for the people working in this research area.

The topics for the deliberations include:

- Hands-on session on 802.11 WiFi Networks: Basics, vulnerabilities, hacks
- Sniffing, Bands
- Promiscuous Modes
- Analyzing Ap-Client Connections
- Analyzing Wlan Headers
- Bypassing Mac Filters
- Wlan Authentication Hacks
- Man-In-The-Middle Attack
- Wep Cracking, Wpa/wpa2 Cracking
- Rogue Access Point & Evil Twin Access Point
- Authentication Flooding Attack
- Deauthentication/Dissociation Flood attack.

- Introduction to cloud computing and its security.
- Authentication, Authorization and Access Control in cloud.
- Identity Issues, Single Sign On, Open Identity Protocol
- Threats, attacks on Cloud based Systems and how to secure them.
- Demonstration of cloud based security using Amazon AWS
- Hand on cloud security using AWS.
- Hands on using open protocols for authentication.

Who can apply?
Students, Faculty, Researchers and Industry candidates interested in IOT technologies and WSNs. **Candidates should send a mail expressing their interest** to participate in the workshop to one of the following:
    deb0001@tezu.ernet.in, ddas@tezu.ernet.in , zubin@tezu.ernet.in

Registration:
Registration of candidates will be conducted on the first day of the workshop (27/03/2017) at 9AM. **Candidates should send a mail expressing their interest for participating by 24/03/17.**

Accommodation fee: Out-station candidates should declare previously if accommodation is required in guest house or hostels. Guest house accommodation is based on seat availability. Candidates will pay for their accommodation.