



ISEA workshop on

“Secure Systems Engineering”

Organized by

Indian Institute of Technology Guwahati
under ISEA – Project Phase II

Hosted by

Department of Electronics & Communication
Engineering, JSSATEB

02nd June, 2022
9:00am-1:00pm

Convenor

Dr. Shivakumarswamy P M
Professor & HOD
Dept. of ECE, JSSATEB

Presided By

Dr. Bhimasen Soragaon
Principal JSSATEB

Coordinators

Dr. Thejaswini P
Assistant Professor
Dept. of ECE, JSSATEB

Dr. Mallikarjunaswamy S
Associate Professor
Dept. of ECE, JSSATEB

Venue

Seminar Hall 1, Academic Block-A

About ISEA

[Information Security Education and Awareness \(ISEA\)](#) project is an initiative of Ministry of Electronics and IT, Government of India to reach out to the students, faculty members and, researchers in order to make them aware and educate in the domain of information security. To facilitate this, availability of qualified and well-trained human resources is needed who could take up R&D work, develop indigenous systems to secure and maintain our personal gadgets, computing systems and critical infrastructure. With this objective, ISEA project facilitate fully funded academic research, internships for faculty and students, and conduct various online and offline events across the country.

About IIT Guwahati

[Indian Institute of Technology Guwahati \(IITG\)](#), the sixth member of the IIT fraternity was established in 1994. IITG has been able to build up world class infrastructure for carrying out advanced research and has been equipped with state-of-the-art scientific and engineering instruments. IITG campus is About IIT Guwahati on a sprawling 285 hectares plot of land on the north bank of the river Brahmaputra around 20 kms from the heart of Guwahati city. The [Department of Computer Science and Engineering](#), started its academic program in the year 1995 and is celebrating 25th year of its inception. It provides an outstanding research environment complemented by excellence in teaching. The department offers B.Tech., MTech., and Ph.D. degree programs. The department has around 30 faculty members actively involved in various cutting-edge research in the field of computer science engineering. System security is one of the most vibrant and prominent research groups in IIT Guwahati.

About JSS Academy of Technical Education

[JSS Academy of Technical Education \(JSSATE\)](#) was established in the year 1997 at Bengaluru and is under the umbrella of JSS Mahavidyapeetha, Mysuru. JSSATE is the result of the vision of our President, His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji to proactively participate in establishing a world class Institution for Technical Education. JSSATEB has seven Under Graduate and four Post Graduate programs in Engineering along with a Post Graduate program in Business Administration. All the Departments have been recognized as “Research Centers” from VTU, Belagavi. The Institute has highly qualified faculty. The Institute has initiated a number of multidisciplinary and multi-institutional R&D programs with AICTE, DST and other Departments. Under the R&D activity, the Institute has taken up the design and fabrication of bio-diesel plant in collaboration with an industry and it is sponsored by the Department of Science & Technology (DST), Government of India. This was recognized as one of the best-completed projects and the same is being replicated in different states.

Workshop Overview

In recent years, with large data explosion, need for high performance computing systems are on an exponential rise. IoT and cloud-based architectures with powerful computing systems at the back end are crucial to meet the growing demand of data and compute intensive applications. Security of this eco system depends on the security of edge, fog, cloud and underlying system infrastructure. We explore how these devices impacts our life and the challenges of the same from security point of view. Workshop also provides a platform for formal as well as informal interaction between participants and resource persons to discuss about possible avenues of collaborations, internship and career opportunities in IITs.

Workshop Objectives

- To comprehend the role of IoT in day-to-day life and to understand IoT infrastructure consisting of Edge, Fog, and Cloud devices.
- To understand IoT building blocks, applications, and case studies.
- To explore and understand security solutions in the IoT space
- To unfold the security challenges and issues in handheld devices.

Workshop Contents

- Role of IoT, Edge and Cloud devices in the modern world.
- IoT Security Challenges and Countermeasures.
- Security Challenges in Embedded Edge Devices.
- Security Challenges in handheld Devices.
- Discussion on career opportunities and higher studies options in IITs.

For Queries

Contact Us -9036337480, 9620203567

Resource Persons



Prof. Sukumar Nandi
Senior Professor, IIT Guwahati



Dr. John Jose
Associate Professor, IIT Guwahati



Sunit Kumar Nandi
Leading Officer, Techno FAQ Digital media

Target Audience

- Students and faculty members from CSE, ECE, and IT.
- Individuals from the any other streams who are passionate about security domain.
- Selection is on **First Come First Serve basis**.
- Shortlisted candidates will receive a confirmation email within 48 hours to complete the final registration formalities.

Registration Details

- No Registration fee.
- **Registration Link:** <https://forms.gle/xgnBMofptDKK8K2R7>
- Last date for registration is **28th May, 2022**
- Certificates will be given to participants who attend the program in-person.