About the Workshop

This workshop is designed to provide participants with a comprehensive understanding of hardware security concepts, particularly focusing on vulnerabilities and threats within hardware systems. Attendees will explore key topics such as the fundamentals of hardware security, methods of attacking hardware and circuits, and an in-depth analysis of Hardware Trojans and their various types. The workshop will also cover practical aspects, including an introduction to Field Programmable Gate Arrays (FPGAs), their programmability, and the associated logic blocks. Additionally, participants will learn about Hardware Description Languages (HDL), as well as techniques for inserting and detecting Hardware Trojans. This hands-on workshop is ideal for professionals and students interested in securing hardware components in electronic systems.. The scope of the workshop is listed below:

- Overview of the importance of security in hardware design and systems..
- Understanding various attack vectors targeting hardware infrastructure.
- Study of different types of Hardware Trojans and their implications on system security.
- Learning the fundamental concepts of HDL for hardware system design.

Targeted Participants

Students (UG/ PG), research scholars/professionals, staff/ faculty members, and industry professionals from different disciplines such as computer science, Electronics and Communication Engineering, and Electrical Engineering backgrounds will be benefitted with this workshop.

Keynote Speakers:

Eminent speakers from IITs, NITs, IISc, Industries and other govt. Institutes.

Patron
Dr. K. Umamaheshwar Rao
(Director of NIT Rourkela)

Chairman
Dr. Bibhudatta Sahoo
(HOD, Dept. of CSE)

Course Contents

This workshop is intended to cover the following topics:

- Overview of Hardware Security.
- Hardware and Circuit Attacks.
- Hardware Trojans and Their Classifications.
- Introduction to FPGA.
- FPGA Programmability and Logic Blocks.
- Introduction to HDL.
- Insertion and Detection of Hardware Trojans.

Facilities

- Welcome Kit
- Refreshments
- Accommodation on payment (visit https://forms.gle/jJPnhrn3E64pZyJt5 for more accommodation details)
- Certificate of completion

NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA

Department of Computer Science and Engineering

Organizing

One -Week Faculty Development Programme

ON

Hardware Security (HaSEC24) (Hybrid Mode)

7th Dec 2024 to 11th Dec 2024

Sponsored By:

Information Security Education and Awareness

इलेक्ट्रॉनिकी एवं सूचना प्रौद्योगिकी मंत्रालय
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
सत्यमेव जयते

About National Institute of Technology, Rourkela

National Institute of Technology (NIT) Rourkela is Institution of national importance funded by the Government of India. NIT Rourkela was established in 1961 as the Regional Engineering College (REC) Rourkela and was later upgraded to the status of an NIT in 2002. The campus covers an area of 262 hectares and provides a serene and conducive environment for academic pursuits. QS World University Ranking placed NIT Rourkela in the rank band of 601-650 for the subject Computer Science and Information Systems. In India, it was ranked 16 among engineering colleges by the National Institution Ranking Framework (NIRF) in 2022. For details about the Institute, please visit the website at: www.nitrkl.ac.in

About Computer Science and Engineering

Computer Science and Engineering (CSE) at NIT Rourkela is one of the most popular courses offered by the Institute. The Department has a strong faculty team with extensive academic and research experience from premier Institutes. The department offers undergraduate, postgraduate, and doctoral program in Computer Science and Engineering.

Important Dates

Registration ends	~~7th Nov 2024~~ **20th Nov 2024**
Workshop dates	7th Dec 2024 - 11th Dec 2024

Registration Form:

To complete online registration, the participants need to fill out the following google form:

https://forms.gle/jJPnhrn3E64pZyJt5

Registration Details

- The students/faculty members of NIT Rourkela are exempted from the payment of the registration fee.
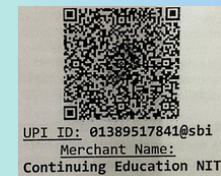- The students/faculty members of NIT Rourkela have to attend the course offline.

Registration Details (Fees Non-Refundable)	
Registration Type	**Fees**
Students (PG)	INR 1000 + 18% GST
Faculty Members	INR 1000 + 18% GST
Scientists from R &D Organization/Industry Persons	INR 1000 + 18% GST

Total registration fee: INR 1180/- only.
Total available seats: 50 seats.

Payment Details

Account Name	CONTINUING EDUCATION NIT ROURKELA
Account No.	10138951784
Bank	State Bank of India
Branch	NIT Campus Rourkela
IFS Code	SBIN0002109

UPI ID: 01389517841@sbi
Merchant Name:
Continuing Education NIT

Workshop Coordinators

Dr. Sumanata Pyne	Contact: 0661-2462369
Dr. Shyamapada Mukherjee	Contact: 0661-2462357

email: stcnitr2024@gmail.com

Contact and Queries:
Please send your queries directly to the student coordinator.
email: 223cs1118@nitrkl.ac.in , 223cs1101@nitrkl.ac.in