Five Days Online STC & FDP

on

INNOVATIONS IN CONTROL AND LEARNING FOR DYNAMICAL SYSTEMS (ICLDS-2024)

Technically Co-Sponsored by IEEE Rourkela Subsection

29th November – 3rd December 2024

National Institute of Technology Rourkela

Odisha, India

www.nitrkl.ac.in

Technical Co-sponsor

IEEE ROURKELA SUBSECTION

Course Overview

The upcoming short course on "Innovations in Control and Learning for Dynamical Systems" will explore cutting-edge advancements at the intersection of control theory and machine learning as applied to complex dynamical systems. The course will cover a wide range of topics, including model-based and model-free control strategies, reinforcement learning, and adaptive control techniques that leverage data-driven insights to improve system performance. Emphasizing both theoretical concepts and real-world applications, the program will explore how these innovations are transforming fields such as robotics, autonomous systems, industrial automation etc. Participants will gain insights into new methodologies for optimizing system behavior, with a focus on data-driven control strategies and will engage with cutting-edge research on stability, robustness, and real-time decision-making in uncertain environments. The course will feature a mix of theoretical foundations and practical applications, highlighting real-world case studies. Through expert-led lectures and hands-on sessions, the course aims to equip professionals, students, researchers, and engineers with the skills to analyze and design dynamical systems capable of learning from their environments and optimizing their responses to dynamic conditions. This course provides a unique opportunity to connect with peers, exchange ideas, and explore the future of control systems in an era of rapid technological evolution.

Topics to be Covered

- Cyberphysical Systems.
- Power System Operation and Control.
- Reinforcement Learning.
- Energy Storage Systems.
- Transportation Electrification.
- Network Control Systems.
- Biomedical Engineering.
- Sliding Mode Control.
- Multi-agent Systems.

Distinguished Speakers from Academia & Industries

- **Prof. Abhilash Patel**, IIT Kanpur.
- **Prof. Sandip Ghosh**, IIT BHU.
- **Prof. Nalin Kr. Sharma**, IIT Jammu.
- **Dr. Jiaqi Yan**, ETH Zurich.
- **Dr. Sribalaji C. Anand**, KTH Royal Institute of Technology, Sweden.
- **Prof. Sumit Kr. Jha**, MNNIT Allahabad.
- **Prof. Karan Jain**, NIT Jalandhar.
- **Prof. Vasundhara**, NIT Warangal.
- **Prof. Jatin Kr. Pradhan**, NIT Rourkela.
- **Prof. Manas Kr. Bera**,NIT Rourkela.
- **Prof. Rajiv Kr. Mishra**, NIT Rourkela.

Online Short Term Course & Faculty Development Program on

Innovations in Control and Learning for Dynamical Systems (ICLDS-2024)

29th November – 3rd December 2024

Organized by

Department of Electrical Engineering

National Institute of Technology Rourkela

Odisha-769008, India

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IEEE ROURKELA SUBSECTION

About the Institute

National Institute of Technology (NIT), Rourkela was founded as Regional Engineering College, Rourkela in 1961. It is a prestigious Institute with a reputation for excellence at both undergraduate and postgraduate levels, fostering the spirit of national integration among the students, a close interaction with industry and a strong emphasis on teaching and research in both basic and applied fields. Being an Institute of National Importance it has been consistently ranked within TOP 20 engineering institutes for last five consecutive years as per NIRF ranking of Ministry of Education, Government of India. The Institute houses twenty versatile departments across different fields of engineering, science, management, and humanities.

NRF Overall	NRF Engg.	NRF Research	QS Asia
34	19	30	291-300

To know more about the Institute please Click Here.

About the Department

The department of Electrical Engineering is established with the vision to design technologies and nurture technologists for diverse and sustainable growth in electrical engineering, leading to wealth and welfare of humanity. The department offers various UG and PG programmes with the mission to develop a platform for forging students as technocrats in line with cutting-edge academic, research and modern industrial practices, and enhancing their aptness in any technical sectors across the globe.

To know more about the EE Department please Click

Who Should Attend

A team of distinguished experts from academia and industries will share their expertise on topics related to the role of control and learning for dynamical systems. Thus, the course is suitable for engineers, faculty, and research scholars pursuing a Ph.D. This course will open up many potential research directions, opportunities and challenges ahead. Interested UG and PG students who would like to further explore cutting-edge research in this area will be accommodated in this course.

The participants will be provided with online certificates upon successful completion of the course.

Registration Details

Category	Registration Fee in INR (including GST)
Research Scholar/PG/ UG Students	Rs. 590/-
Faculties from Academia	Rs. 944/-
Engineers from Industry and R&D Organizations	Rs. 1,180/-

Registration Fee*: To be deposited in the following account.
Account Name: Continuing Education NIT Rourkela
Account Number: 10138951784
IFSC Code: SBIN0002109; **Bank:** State Bank of India; **Branch:** NIT Campus Rourkela **UPI ID:** 01389517841@sbi
after paying the registration fee fill the google form at:https://forms.gle/A6zkeh9UfP3QDtZg6

Registration deadline: 27th November, 2024
Confirmation to participants: 28th November, 2024
Online platform details and detail program schedule will be intimated by: 28th November, 2024

Note: Registration fees is not required for Faculty/Staff/Student of NIT Rourkela. Without registration fees no certificate will be provided.

Coordinators

Dr. Abhishek Dey, Asst. Prof.

Dr. Arijit Guha, Asst. Prof.

Dr. Jatin Kr. Pradhan, Asst. Prof.

Dr. Rajiv Kr. Mishra, Asst. Prof.

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Contact and Queries

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