Course Relevance

This course, "Navigating the Future: AI, Network Programming, and Autonomous Vehicles," comprehensively explores these three interconnected domains. Artificial intelligence (AI) transforms industries and our daily lives. Network programming is the invisible force behind communication and data exchange. Autonomous vehicles hold the potential to revolutionize transportation. The course will cover the core concepts of AI, including machine learning, deep learning, and integration of these technologies to develop power-intelligent machines and applications. The technology behind autonomous vehicles, their challenges, and their potential to revolutionize transportation will be explored. The course will discover the diverse uses of AI in various industries and the way network programming facilitates these real-world applications.

The course is designed for participants interested in:

- Understanding the future of technology.
- Preparing for a future workplace shaped by these advancements.
- Actively participating in shaping the responsible development and implementation of these technologies.

Course Objectives

The course will delve into three key areas shaping the future: AI, Network Programming, and Autonomous Vehicles. The objective of this course is to provide a comprehensive and engaging learning experience, equipping participants with the knowledge and skills to navigate the future shaped by these transformative technologies.

- Discover the vast range of applications for AI in various industries.
- Develop the ability to critically analyze the challenges and opportunities presented by these technologies.
- Examine emerging trends in these fields and their potential future impact.
- Exploring the technology behind AVs, the challenges they face, and their potential to revolutionize transportation.

Topics to be Covered

- Introduction to Artificial Intelligence
- Autonomous Vehicles and Future Mobility
- The technology behind AVs
- The future of Autonomous Transportation
- The future of Network Programming
- Tools and Programming languages for Network Applications
- Emerging trends in AI and their potential impact
- The Science Behind Self-Driving and Connected Cars
- Transforming Transportation with Shared Mobility

Keynote Speakers

- Prof. Peter Han Joo Chong, AUT, New Zealand
- Prof. Pushpendra Singh, JNU, New Delhi
- Prof. Sumantra Dutta Roy, IIT Delhi
- Prof. Niladri Chatterjee, IIT Delhi
- Prof. Sudhakar Pandey, NIT Raipur
- Dr. Amrith Dhananjaya, Cofounder – impress.ai, Singapore
- Prof. G. G. Md. Nawaz Ali, Bradley University, South Carolina, United States
- Mr. Akkireddy Challa, Datafoundry, Australia
- Prof. Sujit Kumar Sahoo, IIT Goa
- Prof. Bidyut Kumar Patra, IIT BHU
- Prof. Rahul Katarya, DTU, Delhi
- Prof. Shashank Srivastava, MNNIT Allahabad
- Prof. Sourav Kanti Addya, NIT Suratkal
- Prof. Suraj Sharma, GGV, Bilaspur
- Prof. Sajeev Patel, NIT Rourkela
- Prof. Arun Kumar, NIT Rourkela

One Week Short-Term Course

on

Navigating the Future: AI, Network Programming, and Autonomous Vehicles

Hybrid Mode

(Online and Offline)

22nd - 26th July 2024

Patron:

Prof. K. Umamaheshwar Rao, Director

Chairman:

Prof. Bibhudatta Sahoo, HOD CS

Convener:

Prof. Arun Kumar

Organised by

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING, NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA

Technically Co-Sponsored by

IEEE ROURKELA SUBSECTION

About NIT Rourkela

National Institute of Technology (NIT) Rourkela is an institution of national importance funded by the Ministry of Education. NIT Rourkela was established as Regional Engineering College (REC) on August 15, 1961. NIT Rourkela was ranked 601-800 in the world by the Times Higher Education World University Rankings of 2018 and 126th in Asia. In India, it was ranked 16 among engineering colleges by the National Institutional Ranking Framework (NIRF) in 2023. For details about the institute please visit us at www.nitrkl.ac.in.

Tourist Places Nearby

Khandadhar Waterfall

Hanuman Vatika

Pitamahal Dam

Vedvyas Temple

Mandira Dam

About Department of Computer Science and Engineering

The department was established with the vision to prepare its students for professional employment and graduate education through study and implementation of the fundamental principles of theory, abstraction, and software design, while at the same time presenting the ethical and social issues associated with computer science.

The department offers various UG and PG programmes with the mission to o provide high-quality education that prepares the graduates for success in their professional practice and advanced studies. The department also offers M. Tech in Computer Science, Information Security, and Software Engineering; and Ph. D. for regular as well as sponsored candidates. Please visit *https://website.nitrkl.ac.in/CS/* to know more about the department of CSE.

Target Participants

The short-term course is of immense interest for UG/ PG students, research scholars/professionals, staff/ faculty members and industry professionals working in the area of Cyber Security Systems. The participants having Computer Science and Engineering, Electronics and Communication Engineering, and Electrical Engineering background will be benefitted with this short-term course.

Convener:

Dr. Arun Kumar
Assistant Professor
Department of CSE, NIT Rourkela
Email: kumararun@nitrkl.ac.in
Mobile no.: +91 9971867785

Registration Form:

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

https://forms.gle/YR332DGRaoadetwU8

E-certificates *will be provided to the registered participants upon successfully completing the course.*

Contact and Queries:

Please send your queries
directly to the coordinator: Dr. Lopamudra Hota
student coordinator: Mr. Biraja Prasad Nayak, Ms. Prangya Priyadarshini
email: stc.itssc.2023@gmail.com, lopu1007@gmail.com, prangya15897@gmail.com .

Important Dates

Registration Deadline	18th July 2024
Confirmation to participants by email	20th July 2024
Commencement of Course	22nd July 2024

Registration Details

- The registration fee for various participants for attending the short-term course is given below:
- The students/faculty members of NIT Rourkela are exempted from the payment of registration fee.

Early Registration Details by 10th July

Registration Type	Fees
Students	INR 500
Faculty Members	INR 1000

Registration Details (Fees Non-Refundable)

Registration Type	Fees
Students	INR 750
Faculty Members	INR 1250
Scientist from R &D Organization/Industry Persons	INR 2000

Bank Account Details for Registration

Account Name	CONTINUING EDUCATION, NIT ROURKELA
Account No.	10138951784
Bank	State Bank of India
Branch	NIT Campus Rourkela (02109)
IFS Code	SBIN0002109
UPI ID	01389517841@sbi