Chief Patron

Prof. K. Umamaheshwar Rao
Director, NIT Rourkela

Patron

Prof. Manoj Kumar Mishra
President, FTBI, NIT Rourkela

Local Organizing Committee

Prof. B. D. Sahoo, Head, CSE Department
Organizing Chair
Prof. R. K. Sahoo, FTBI
Prof. S. Asha, CSE Department, Organising Secretary
Prof. Sibarama Panigrahi, Finance Chair
Prof. R. K. Mohapatra, CSE Department
Prof. Suchismita Chinara, CSE Department
Prof. P. K. Jain, CSE Department
Prof. P. Dey, CSE, Department
Prof. P. Bhattacharya, CSE, Department
Mr. Chiranjibi Samal, FTBI

Registration Form:

To complete the online registration, the participants need to fill the following google form on or before 20th June 2024

https://forms.gle/CM2kFnKHWJHxM3YJ6

Correspondence

Dr. Durga Prasad Mohapatra
Professor & Chairman, AIML - 2024
Department of Computer Science & Engg.
National Institute of Technology, Rourkela
Rourkela-769 008, Odisha, India
Phone: 0661-2462356(O), 9437648628(Mob)
E-mail: **durga@nitrkl.ac.in**

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Department of Computer Science & Engineering, NIT, Rourkela was established in 1982. Since its inception, the Department is under dynamic progress and is able to establish the reputation for imparting quality education both at undergraduate and graduate programmes. The department has well equipped modern laboratories such as Software Engineering, Distributed Object Systems, Information Security & Data Communication, Image Processing & Cluster Computing and Advanced Database Engineering Labs for pursuing research keeping in view of the technological advancement.

About FTBI

Foundation for Technology & Business Incubation (FTBI), a section 8 Not for Profit Company housed under Center for Technology Innovation and Industry Relations (TIIR) at NIT, Rourkela is an effort in the same direction. It is supported by National Science & Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology (DST), Government of India. It strives to create an environment where hundreds of professors and thousands of students carry out research on subjects for wealth and wellbeing of society.

DST-SERB
Sponsored
5-Day National Workshop
on
ARTIFICIAL INTELLIGENCE & MACHINE LEARNING:
Theory & Hands-on Practice
(AIML- 2024)

24th – 28th June 2024

Dr. Anup Nandy
Dr. Ratnakar Dash
Conveners

Prof. Durga Prasad Mohapatra
Chairman

Organized by
Skill Development Cell,
FTBI, NIT Rourkela
In association with
Department of Computer Sc.& Engineering
National Institute of Technology
Rourkela-769 008, Odisha

http://www.nitrkl.ac.in

ABOUT THE WORKSHOP

This workshop intends to provide an insightful discussion on recent trends of Artificial Intelligence and Machine Learning techniques. The applications of AI and ML techniques are enormous in many fields such as software engineering, bio-informatics, medical engineering, robotics, computational imaging, computational neurosciences etc. This workshop will focus on basic AI and machine learning techniques with real-life problem-solving ability. The purpose of this workshop is to discuss fundamental of AI algorithms with perception and action in the light of interactive training session. The scientists, engineers, faculties and researchers who are working in this area, will be benefited to know about different AI and ML methods in diversified applications.

This workshop will provide a forum for discussing theoretical and practical aspects of basic AI and ML algorithms. It will help in exchanging research ideas and challenges, exploring possible solutions and future directions. The main goal of this workshop is to bring together researchers & practitioners from both academia & industry & improve their skills on AI & ML.

INVITED TALKS

The workshop mainly includes invited lectures on recent advances in AI and ML techniques. The invited lectures will be delivered by IITs, NITs faculty members and some industry experts.

CONTENTS OF THE WORKSHOP

1. Introduction to Artificial Intelligence
   - What is AI
   - What are Intelligent Machines and What machines can do
   - The history of AI and foundations of AI
2. Basic Search Algorithms (Uninformed Blind Search)
   - Breadth-first Search
   - Depth-first Search
   - Uniform Cost Search
   - Iterative Deepening and Bidirectional Search
   - Branch-and-Bound Search
   - Greedy search
   - Hill climbing
   - Best-first search & A* search, Heuristics
3. Expert Systems Applications with AI Techniques
4. Introduction to Machine Learning
   - What is Machine Learning
   - Types of Machine Learning techniques (Supervised, Unsupervised and Semi-supervised)
   - Performance measures of Machine Learning Models
5. Understanding different Discriminative Models
   - Least Square Regression Method (Single and Multivariate)
   - Gradient Descent Algorithm
   - Probabilistic Interpretation for Prediction Models
6. Dimensionality Reduction and Unsupervised Learning
   - Principal Component Analysis and Linear Discriminant Analysis
   - K-Means Clustering Algorithm
   - Agglomerative Clustering Methods

REGISTRATION & FEE PARTICULARS

The registration fee for various participants for attending the workshop is given below:

Registration Type	Fees (INR)
Employees from Industry and R & D	5000
Faculty from Academic Institution	3000
UG/PG/PhD Students	2000

Registration fee includes workshop materials, food, and banquet dinner.

Bank Account details for registration

Account Name	CONFERENCE NIT ROURKELA
Account No	36734418111
Bank Name	State Bank of India (02109)
Branch	NIT Campus Rourkela
IFSC Code	SBIN0002109

Accommodation:

Accommodation may be provided in Institute Guest house/ Hostels on payment basis with prior request, subject to availability.

The participants will be reimbursed 3AC journey fare through the shortest route on prior request.

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5-Day National Workshop
on
ARTIFICIAL INTELLIGENCE & MACHINE LEARNING:
Theory & Hands-on Practice

(AIML- 2024)

24th – 28th June 2024
Registration Form

1. Name: ……………………………………………
2. Designation: ………………………………………..
3. Organization: ……………………………………......
4. Address: …………………………………………......

   ……………………………………………………

   Phone: ………………….Mob: ………………………

   E-mail: …………………………………………......
5. Accommodation Required: YES/NO

   If Yes, Pl. specify Guest house/Hostel
6. Gender: Male/Female
7. Registration Fee Details:

   Transaction ID: …………………………

   Amount: ……………… Date: ………………….

   Bank & Branch: …………………………………….

Place:

Date: Signature of the Applicant

Copies of this form can be made, if necessary. Please send the duly filled in form to the Chairman on or before 20th June 2024.