



Adcomsys 2024

Organized by:

https://adcomsys.uem.edu.in/





1st May 2024

26th & 27th June 2024



Submission of Copyright:

Date(s) of Conference



INTERNATIONAL ADVISORY COMMITTEE

Dr. Lawrence Dalmarie - UDC, USA

Dr. Karina Aragon Gaxiola - University of Waterloo, Canada

Dr. Mohammad Al Azawi - OCMT, Oman

Dr. Mohammed Beitsuwaflim - Sultan Qaboos University, Oman

Dr. Dena McMartin - University of Saskatchewan, Canada **Dr. David deMontigny** - University of Regina, Canada

Dr. Mohd Hafiz Bin Fazalul Rahiman - UMP, Malaysia

Dr. Nathalie Tourigny - University of Waterloo, Canada

Dr. Marian Langbridge - SEMC, UK Dr. March - Shannon, UN, Canada

Dr. lei zhu - NREL, USA

Dr. Michael Osborne - University of Oxford, UK

Dr. Robert F Davis - CMU, USA

Dr. Burak O Ozdoganlar - CMU, USA

Dr. Boudreault - Mathieu, MHI, Canada **Dr. Obermayer** - KTU, Netherland

Dr. Boukadoum - A. MMHI, Canada

Dr. Richard Linley - University of Cambridge, UK Dr. Qusay Mahmoud - Ontario Tech University, Canada

Dr. Mekonnen - Gashaw, CHSAAU, Ethiopia

Dr. Gregory Dudek - McGill University, Canada Dr. Sylvie Thiebaux - ACCS, Australia

Dr. Adam W. Skorek - University of Québec at Trois-Rivières, Canada

Dr. Michel Plaisent - University of Quebec in Montreal, Canada Dr. Jörg Sander - University of Alberta, Canada

Dr. Erik Cambria - Nanyang Technological University, Singapore Dr. Nathalie Japkowicz - American University, USA

Dr. Liming Zhang - University of California, USA Dr. Wudhichart Sawangphol - Mahidol University, Thailand

Dr. Noraisyah Binti Mohamed Shah - University of Malaya, Malaysia

Dr. Raj Jain Washington University - USA Dr. Hadj Bourdoucen - Sultan Qaboos University, Oman

Dr. Vincenzo Piuri - Universita' degli Studi di Milano, Milano, Italy

Dr. Nor Ashidi Mat Isa - Universiti Sains Malaysia, Malaysia

Dr. V.G. Tharinda Nishantha Vidanagama - WUSL, Sri Lanka Dr. Hazlie Mokhlis - University of Malaya, Kuala Lumpur, Malaysia.

Dr. Ahmad Zhafran Bin Ahmad Mazlan - USM, Malaysia

Dr. Nadine Akkari - Jeddah International College, Saudi Arabia

Dr. Basel Barakat - University of Greenwich, UK Dr. Hosam El-Ocla - Lakehead University, Canada

Dr. Mohd Asyraf Zulkifley - National University of Malaysia, Malaysia

TECHNICAL PROGRAM COMMITTEE

Dr. Rajat Kumar Pal - University of Calcutta, Kolkata, India

Dr. Mokbul Morshed Ahmad - Asian Institute of Technology, Thailand Dr. Nabendu Chaki - University of Calcutta, India

Dr. Mohd Syuhaimi Ab Rahman - NUM, Malaysia Dr. Rajitha B - MNNITA, Prayagraj, India

Dr. Shirley Devapriya Dewasurendra - University of Peradeniya, Sri Lanka Dr. Anirban Mukhopadhyay - University of Kalyani, Kalyani, India

Mr. Bidit Pakrashi - Comcast, USA

Dr. Debashish De - MAKAUT, West Bengal

Dr. Sheng-Lung Peng - National Dong Hwa University, Hualien, Taiwan Dr. Indrajit Banerjee - IIEST, Shibpur, India

Dr. Shivendra Shivani - Thapar University, Patiala

Dr. Ekramul Hamid - University of Rajshahi, Bangladesh Dr. Chintan Kumar Mandal - Jadavpur University

Dr. Media Anugerah Ayu - Sampoerna University, Indonesia Dr. Santi Prasad Maity - IIEST, Shibpur, India

Dr. Fatima Isiaka - Sheffield Halam University, United Kingdom

Dr. Peter Loh Kok Keong - Nanyang Technological University, Singapore Dr. Asish Kumar Mukhopadhyay - Prof. Emeritus, IET, BU, Jhansi, U.P.

Dr. Apurba Sarkar - IIEST, Shibpur, India

Dr. Jaya Sil - IIEST, Shibpur, India

Dr. Tapas Chatterjee - Indian Institute of Technology, Ropar

Dr. Hamid Abdullah Jalab al-Tulea - UM, Kuala Lumpur, Malaysia Dr. Chang-Biau Yang - National Sun Yat-sen University, Kaohsiung, Taiwan

Dr. Surajit Kumar Roy - IIEST, Shibpur, India

Dr. David deMontigny - University of Regina, Canada

Dr. Mohd Hafiz Bin Fazalul Rahiman - UMP, Malaysia Dr. Marian Langbridge - School of Engineering & Material Science, UK

Dr. March, Shannon - University of Newfoundland, Canada Dr. Lei Zhu - National Renewable Energy Laboratory, USA

Dr. Nidul Sinha - National Institute of Technology, Silchar, Assam, India

Dr. Annapa B - National Institute of Technology, Silchar, Assam, India Dr. Malay Kule - IIEST, Shibpur, India

Dr. Sankhayan Choudhury - University of Calcutta, India

Dr. Sunirmal Khatua - University of Calcutta, India Dr. Pritha Banerjee - University of Calcutta, India

Dr. Rajib Das - University of Calcutta, India

Dr. Bansibadan Maji - National Institute of Technology, Durgapur, India Dr. Tanvi Agrawal - Indian Institute of Technology, Mumbai

Dr. Sahil Neelam - Punjab Institute of Technology Kapurthala, India Dr. Rik Das - Xavier Institute of Social Service

Dr. Parag Kumar Guha Thakurta - NITD, India

Dr. Simon Stieber - University of Augsburg, UNA Dr. Abdulnasir Hossen - Sultan Qaboos University, Oman

Dr. Padmalochan Bera - Indian Institute of Technology, Bhubaneswar

Dr. Himadri Shekhar Dutta - Kalyani Govt. Engineering College

Dr. Ahmad Zaidi bin Abdullah - Universiti Malaysia Perlis, Malaysia Dr. Roy Eagleson - Western University, Canada

Dr. Soumya Sen - University of Calcutta, India

Dr. K.K. Shukla - IIT, Banaras Hindu University, India Dr. Julia Johnson - Laurentian University, Sudbury, Ontario, Canada

Dr. Rinki Sharma Ramaiah - UAS, Karnataka, India Dr. Tapas Si - University of Engineering & Management, Jaipur Dr. Normi sham bt. Awang Abu bakar - IIU, Malaysia

Prof. Adrian Schmidt - Burman University, Canada Dr. Ke-Lin Du - Concordia University Montreal, Canada

Dr. Hamed Sadat mehrizi - Qazvin Azad University, Iran Dr. Rosli Bin Besar - Multimedia University, Malaysia

Dr. Saradindu Panda - Narula Institute of Technology Kolkata, India Dr. Nirnay Ghosh - IIEST, Shibpur, India

Dr. Indranil Chakrabarty - IIIT, Hyderabad, India Dr. Arijit Banerjee - Federated Wireless, USA

Dr. Konika Das Bhattacharya - IIEST, Shibpur, India Mr. Sanjay Saha - SAMSUNG, India

Dr. Rudra Pratap Ojha - G. L. BITM, Greater Noida, India Dr Soumya Ranjan Mishra - SCE, KIIT University, Bhubaneswar, India

Dr. Dhananjoy Bhakta - IIIT Ranchi, India Dr. Mandeep K. Chawla - MCM DAV College for Women, Chandigarh, India

Dr. Karl F. Bohringer - University of Washington, USA Dr. Gitosree Khan - BP PoddarlMT, Kolkata, India

Dr Anirban Mitra - Amity University, Kolkata, India

Dr. Samya Muhuri - TIET, Patiala, India Dr. Kousik Dasgupta - KGEC, Kalyani, Nadia, West Bengal, India

Dr. Samir Kr Borgohain - NIT, Silchar, Assam, India Dr. Nassir Jabir Farhan AL-Khafaji - Technical Institute of Nasiriyah, Iraq

Dr. Bhaskar Karn - Birla institute of Technology, Mesra, India Dr. Dhruba Jyoti Bora - MIT, Chittoor, Andhra Pradesh, India

Dr. Debashree Devi - IIIT, Guwahati, Assam, India Mr. Subham Bid - Associate at CB Tech, Deutsche Bank, Pune, India

Miss. Shirsha Chakraborty - SSE, Marsh Mclennan, USA Dr. Sandip Das - GITS, Udaipur, Rajasthan, India Dr. Riya Sen - GITS, Udaipur, Rajasthan, India

Dr. Sumana Kundu - Dr. B. C. Roy Engineering College, Durgapur, India

Dr. Ravi Kant Kumar - SRM University, Andhra Pradesh, India Dr. Prabhat Kumar Upadhyay - Birla Institute of Technology, India

Prof.Dr. Ayan Banerjee - IIEST, India

127.0.0.1:5173

First International Conference on Advanced Computing Systems

Department of Computer Science and Technology & Computer Science and Information Technology (CST and CSIT)

26th and 27th June, 2024

The IEM UEM group is an acclaimed educational group amongst today's industry-centred academic training organisations. IEM has set sublime standards in addressing the technical and managerial resource shortage in the new era of dynamic globalisation. The IEM UEM group has risen to fame for its strong foundation in teaching and R&D in multifaceted areas. It aims to serve the future generation and the Nation through its commitment towards selfsufficiency and unmatchable excellence. University of Engineering & Management (UEM) aims to provide an international ambience and exposure with innovative teaching techniques and courses which are tailor-made (technical & soft skills) for the job market giving the students the winning edge and competitive advantage during placements.

The International Conference on Advanced Computing and Systems (AdComSys) will foster an excellent international forum for exchanging knowledge and the recent developments in theory, methodologies and applications in Artificial Intelligent (AI) systems, Internet of Things (IoT) systems, Cybersecurity and Blockchain systems and emerging computing techniques. The AdcomSys aims to encourage the intense dialogues between academia and industry to bridge the gap between scholarly research, industrial initiatives and governmental policymaking. AdComsys 2024 will attribute to the diverse spectrum of keynote addresses, technical tracks, panel discussions and industry exhibits where academia can view state-of-the-art findings from the trials and interoperability experiments. Furthermore, the industry will benefit from exposure to leading-edge research and an opportunity to interact and fraternize with academic researchers on real-world issues.

The purpose of AdComSys 2024 is to solicit original research and technical papers from researchers, scientists, academicians, industry professionals and students to report their experience, new ideas and research results about advanced computing and systems to discuss the practical challenges encountered and solutions adopted.

AdComSys 2024 will be held at the University of Engineering and Management, Kolkata, on June 26th-27th, 2024.

DOMAINS OF POTENTIAL EXPLORATION

Fog Computing

Al with Robotics

Mobile Computing

Cognitive Computing

Track 1: Emerging Computing

Cloud Computing Parallel Computing **Green Computing** Geoscience and Remote Sensing **Human Centric Computing**

Grid Computing Quantum Cryptography Cognitive Intelligence Audio, Speech and Video

Biomedical and Health Informatics

Affective Computing Fuzzy Systems Bio-inspired Computing

Bioinformatics

Dew Computing

Pervasive Computing

Industrial Informatics

Digital Forensics

Evolutionary Computation

Neuromorphic Computing

Track 2: AI Systems

Intelligent Systems **Explainable AI Active Learning Generative Models**

Processing

Quantum Computing

Featured Learning **NLP-based Smart Systems** Robotics Systems **Big Data Data Mining**

Deep Learning Generative Adversarial Network

Al-based Image Processing Reinforcement Learning Meta Learning **Soft Computing** Data Analytics Systems Automation

Track 3: IoT Systems

Cybernetics

IoT in Healthcare IoT in Agriculture **Human Activity Recognition** IoT in Everything AlloT

IoT in Vehicular Network IoT in Industry **IoT in Smart City** IoT in Underwater Surveillance 5G & beyond 5G Wireless Sensor Networks Industry 4.0

Track 4: Cyber Security Systems and Blockchain

Blockchain Authentication Cryptocurrency **Smart Contracts Encryption Techniques** Blockchain-based Machine Crypt Analysis Learning

Security, Privacy, Attacks, and **Forensics** Security in IoT

Dependable and Secure Computing

PAPER SUBMISSION LINK

https://cmt3.research.microsoft.com/

Authors are solicitated to contribute to the conference by submitting articles at the above link that illustrate research results, projects, surveying works and industrial experiences that describe significant advances in computing, communication and automation.

Submission Guideline The papers must be submitted ONLINE though CMT Link. Please follow standard author instructions of Springer conference for paper format

Publication: All accepted and presented papers will be published by the Web of Science (WoS) indexed Springer Nature Book Series "Algorithms for Intelligent Systems" (https://www.springer.com/series/16171) **Mode of Conference: Hybrid mode**

IMPORTANT DEADLINES

Full Paper Submission Open: 28th August 2023 **Full Paper Submission:** 6th December 2023 **Acceptance Notification:** 6th March 2024 **Early Bird Registration:** 25th March 2024 **Last Date of Registration:** 15th April 2024 **Final Camera Ready Paper** 1st May 2024

ORGANISING COMMITTEE

Chief Patron

Management, Kolkata)

Prof. Dr. Satyajit Chakrabarti - Chancellor (University of Engineering and Management, Kolkata)

Prof. Dr. Sajal Dasgupta - Vice Chancellor (University of Engineering and

Prof. Dr. Satyajit Chakrabarti - Pro-Vice Chancellor (University of Engineering and Management, Kolkata) Prof. Dr. Sukalyan Goswami - Registrar (University of Engineering and

Management, Kolkata) Prof. Dr. Rajashree Paul - Deputy-Dean (University of Engineering and

Management, Kolkata) Prof. Dr. Kamakhya Prasad Ghatak - Dean-Engineering (University of Engineering and Management, Kolkata)

Management, Kolkata) Prof. Dr. Abir Chatterjee - Dean-Research (University of Engineering and

Prof. Dr. Rajiv Ganguly - Dean-Science (University of Engineering and

General Chair

Prof. Dr. Maumita Chakraborty (Department of Computer Science and Technology & Computer Science and Information Technology, University of **Engineering and Management Kolkata)**

Prof. Dr. Weiping Ding (Deputy Dean of School of Information Science and Technology, Nantong University, Nantong, Jiangsu, China)

Prof. Dr. Shouvik Chakraborty (Department of Computer Science & Technology, Women's Polytechnic, Chandernagore, Government of West Bengal, Chandannagar, Hooghly, West Bengal, India)

Convener

Co-Conveners

Prof. Dr. Maumita Chakraborty (University of Engineering and Management

Prof. Dr. Sudipta Basu Pal (University of Engineering and Management Kolkata,

Prof. Dr. Subhalaxmi Chakraborty (University of Engineering and Management

Prof. Dr. Chiradeep Mukherjee (University of Engineering and Management Prof. Sankhadeep Chatterjee (University of Engineering and Management

Kolkata, India)

Technical Chair Prof. Dr. Danilo Pelusi (University of Teramo, Faculty of Communication

Sciences, Teramo, Italy) Prof. Dr. Valentina Emilia Balas (Aurel Vlaicu University of Arad, Romania)

Prof. Dr. Amlan Chakrabarti (A.K.Choudhury School of Information Technology, **University of Calcutta)** Prof. Dr. Asit Kumar Das (Department of Computer Science and Technology,

Indian Institute of Engineering Science and Technology, Shibpur)

India)

India)

Industry Chair Mr. Sushovan Chanda (TCS Innovation Cell)

Finance Chair

Mr. Indraneel Banerjee (University of Engineering and Management Kolkata) **Organizing Committee Members**

Dr. Srilekha Mukherjee (University of Engineering and Management Kolkata,

Dr. Panchali Datta Choudhury (University of Engineering and Management Kolkata, India)

India) Prof. Stobak Dutta (University of Engineering and Management Kolkata, India) Prof. Prasenjit Kumar Das (University of Engineering and Management Kolkata, India)

Dr. Anirban Chakraborty (University of Engineering and Management Kolkata,

Prof. Pradipta Sarkar (University of Engineering and Management Kolkata, India) Prof. Sanjukta Mishra (University of Engineering and Management Kolkata,

Prof. Piyali Chandra (University of Engineering and Management Kolkata, India)

Prof. Kamalika Bhowal (University of Engineering and Management Kolkata, India) Prof. Sudipta Sikdar (University of Engineering and Management Kolkata, India) Dr. Rajendrani Mukherjee (University of Engineering and Management Kolkata,

India) Dr. Tapas Guha (University of Engineering and Management Kolkata, India)

REGISTRATION

Regular Author Student India/SAARC (INR) Foreigner (USD)

Early Bird - 4500 Early Bird - 100+12% Tax and Bank charges **Regular** - 5500 Regular - 150+12% Tax and Bank charges

Regular Author Academician, PhD Scholars India/SAARC (INR) Foreigner (USD) Early Bird - 200+12% Tax and Bank charges **Early Bird** - 5000

Regular Author from Industry

Regular - 6000

India/SAARC (INR)

Early Bird - 2500

India/SAARC (INR) Foreigner (USD)

Early Bird - 7000 Early Bird - 200+12% Tax and Bank charges Regular - 8000 Regular - 250+12% Tax and Bank charges

Foreigner (USD)

Regular - 250+12% Tax and Bank charges

Early Bird - 80+12% Tax and Bank charges

Regular - 2500 Regular - 80+12% Tax and Bank charges *All rates are exclusive of GST

Dr. Sudipta Basu Pal - 9674335060

Only Attending or Accompanying

Dr. Chiradeep Mukherjee - 9804244362 Dr. Subhalaxmi Chakraborty - 7003720703 Prof. Sankhadeep Chatterjee - 8910874737

Contact Us

UNIVERSITY OF ENGINEERING & MANAGEMENT KOLKATA Address: University Area, Plot No. III – B/5, New Town, Action Area – III, Kolkata – 700160