

RV College of Engineering<sup>®</sup>



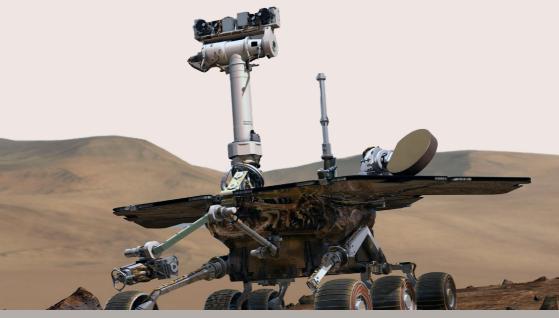
Fachhochschule Dortmund University of Applied Sciences and Arts



# 8thCSITSSConference Record #64042

Computational Systems & Information Technology for Sustainable Solutions

7th to 9th November 2024 at RVCE, Bengaluru



Organised by RV College of Engineering in association with Florida International University, Fachhochschule Dortmund,Germany. Technically Co-Sponsored by IEEE Bangalore section, India

# Vision

Leadership in Quality Technical Education, Interdisciplinary Research and Innovation, focusing on Sustainable and Inclusive Technology.

# Mission

- To deliver outcome-based quality education, emphasizing on experiential learning with state-of-the-art infrastructure.
- To create a conducive environment for interdisciplinary research and innovation.
- To develop professionals through holistic education focusing on individual growth, discipline, integrity, ethics and social sensitivity.
- To nurture industry-institution collaboration leading to competency enhancement and entrepreneurship.
- To focus on technologies that are sustainable and inclusive, benefiting all sections of the society.

# About RVCE

RV College of Engineering (RVCE) established in 1963 is one of the earliest self-financing engineering colleges in the country. The institution is run by Rashtreeya Sikshana Samithi Trust (RSST) a not-for-profit Trust. RVCE is an Autonomous college. Currently, the institution offers 15 Bachelor, 14 Master Programs and all the departments have Research Centres, affiliated to Visvesvaraya Technological University (VTU) Belagavi.

Recent awards and achievements include - Ranked 96th in the Country by National Institutional Ranking Framework (NIRF: 2021-22), "Engineering College of the Year-2023" by the Higher Education Review Magazine, Ranked 10th in the country & 2nd in Karnataka - IIRF Ranking (2023), Ranked 6th among the top 10 of 100 Pvt. Engg. Colleges in the Country by Education World Magazine-2023. Ranked 1501+ in Times Higher Education World University Rankings-2024. Ranked 801+ in Computer Science and 1001+ Rank in Engineering category in THE World University Rankings-2024, Ranked 1501+ in Impact Ranking in THE World University Rankings-2024, Ranking 601+ in Times Higher Education Asia University Rankings-2024 and NPTEL (Local Chapter) "AAA" Rating.

RVCE has to its credit over 1700 national and international journal publications, 70 filed patents, out of which 59 were published patents, 38 granted patents and executed over Rs. 30 crores of sponsored research projects and consultancy in the last five years.

# About The Conference

The 8th International Conference on Computational Systems and Information Technology for Sustainable Solutions [CSITSS – 2024] focuses on bringing together leading academicians, scientists, researchers, industry representatives, postdoctoral fellows and research scholars around the world to share their knowledge and research expertise in Green Electronics, Renewable Energy, Robotics and Automation, Photonics, Artificial Intelligence, Cyber-Physical Systems, Quantum Mechanics and Computing from November 7th to 9th 2024.

The conference has been successfully organised for the past seven years with participants from all over India and abroad. All peer-reviewed, selected and presented papers from the conference will be submitted for possible inclusion in IEEE digital library. International speakers will deliver keynote talks on the latest technologies in these domains. The CSITSS-2024 ensures to provide a platform for researchers around the globe for knowledge exchange and networking. The Conference is approved by IEEE with the conference number : 64042

# **Call For Papers**

Prospective authors are encouraged to submit quality and original research papers for presentation at the Conference. Authors are requested to submit their manuscripts in PDF format not exceeding 6 pages in A4 size through online submission at Microsoft CMT - on or before **30th July 2024**. The manuscript should follow the standard IEEE template. The format of the paper can be downloaded in the link below

# https://www.ieee.org/conferences/publishing/templates.html.

All submissions for the conference will be handled electronically and submitted papers will be peer-reviewed by domain experts. To submit the papers, use the Microsoft CMT Link mentioned below: https://cmt3.research.microsoft.com/CSITSS2024.

# Conference Tracks

Authors are invited to submit their original research work in the following areas (but not limited to)

- Computational Analysis of Structural and Functional Materials
  - Energy Materials, Nanomaterials, Smart Materials
  - High-performance Embedded Computation
  - Decision and Planning
  - Target Tracking/Recognition
- Green Electronics: Sustainable Practices
  - Eco-Friendly Materials for Electronics
  - Energy-Efficient Electronic Devices
  - Green Supply Chain Management in Electronics
  - Biodegradable and Organic Electronics
- Robotics and Automation
  - Artificial Intelligence in Robotic
  - Human-Robot Interaction
  - Agricultural Robotics
  - Robotic Perception and Sensing
- Photonics, Optoelectronics and Mechatronics System
  - Fiber optics and optical communications
  - Optical sensors and imaging systems
  - Control systems and intelligent systems
  - Micro-electromechanical systems (MEMS)
- · Artificial Intelligence for Sustainable World
  - AI and ML engineering and science applications
  - Natural language processing and large language models for regional requirements
  - Advanced AI models and algorithms
  - Mathematical algorithms for ML
  - New generation hardware architectures for AI
  - Generative AI for society and industry
- Digital Transformation in Various Sectors of Economy
  - Digital transformation in Logistics
  - Digitization and Inclusivity in Banking and Financial Services Sector
  - Digital Modeling practices in Manufacturing
  - E commerce and E business

# Renewable Energy and Environmental Engineering

- Microgrids & Smart grids
- Power Electronics application to Renewable Energy systems
- Computational Intelligent Techniques for Energy Sustainability
- Distributed Energy system and Control Strategies
- Power System operation, resilience, monitoring and control
- Carbon Capture, Utilization & Storage (CCUS) and Alternative Fuels

# Cyber-Physical Systems

- Next-Generation CPS Architectures
- IoT-based Smart Infrastructures
- Cybersecurity Challenges in CPS
- Ethical Considerations in CPS Design and Deployment

# · Biomedical Electronics and Healthcare Applications

- Biomedical Image processing
- Biosensors and Wearable electronics
- Point of care devices, Bio\_Mems

# Quantum Mechanics and Computing

- Hybrid quantum-classical computing systems
- Quantum simulation and modelling
- Quantum machine learning and optimization algorithms

# Next-Generation Communication Systems

- Internet of Things (IoT),5G and Beyond
- Edge Computing and Edge Networking
- Software-Defined Networking (SDN) and Network Function Virtualization (NFV)
- Satellite Communication Systems
- Wireless Sensor Networks and Smart Grid Communication
- Blockchain and Distributed Ledger Technologies (DLT)
- Emerging Communication Technologies

## Submission Guidelines:

- Authors are requested to submit their manuscripts in PDF format not exceeding 6 pages in A4 size through online submission at Microsoft CMT on or before 30th July 2024.
- The manuscript should follow the standard IEEE template. The format of the paper can be downloaded in the link :https://www.ieee.org/conferences/publishing/templates.html
- To submit the papers, use the Microsoft CMT Link mentioned below: https://cmt3.research.microsoft.com/CSITSS2024

#### Awards:

The below awards will be conferred by CSITSS-2024.

- i. Best Ph.D Thesis
- ii. Best Faculty and Student Paper

Ph.D. scholars, who have been awarded their Ph.D. degree in the conference themes specified from recognized universities during the period June 1, 2023 to June 1, 2024, are eligible to apply for CSITSS 2024 Best Ph.D. Thesis Award. Ph.D. Thesis (in pdf format) and degree certificate can be submitted to the Email ID: csitss2024@rvce.edu.in. Application fees: Rs.1000/-. Refer conference website for more details.

# **Registration:**

Authors and participants are requested to download the registration form from the conference website and submit the filled form to the Email ID: csitss2024@rvce.edu.in

Indian (Amount in INR ₹)/Foreign Authors and Delegates (Amount in USD \$)				
Particulars	Early Bird (On or before 18 <sup>th</sup> September)		Regular Registration	
	IEEE	Non-IEE	IEEE	Non-IEEE
Students / Research Scholars	₹5310/\$80	₹6490/\$110	₹6490/\$110	₹7670/\$130
Academicians	₹7080/\$100	₹8260/\$130	₹8260/\$135	₹10030/\$165
Industry Professionals	₹8260/\$110	₹9440/\$135	₹11800/\$200	₹15930/\$240
Pre Conference Tutorial: ₹500/\$25				
(All the pricing details mentioned above are inclusive of 18% GST)				

# **BANK DETAILS**

- Name: PRINCIPAL, RVCE
- Bank Account Number. 136010112055
- Bank Name: KOTAK MAHINDRA BANK
- Branch Name: RVCE Campus, Bengaluru
- IFSC Code: KKBK0008053
- SWIFT Code: KKBKINBB

#### Important Dates

- Submission of Full-length Manuscript (opens from) 5th July 2024
- Last date to submit Full-length Manuscript 30th July 2024
- Notification of Acceptance 28th Aug 2024
- Early Bird Registration Before -18th Sept 2024
- Submission of Camera-ready Manuscript and Copyright form 10th Oct 2024
- Last Date for Registration -25<sup>th</sup> Oct 2024
- Pre-Conference Tutorial 7<sup>th</sup> Nov 2024
- Conference Dates 8<sup>th</sup> and 9<sup>th</sup> Nov 2024

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