



# International Conference on **INTELLIGENT MOBILITY SYSTEMS**

Organised by:

**Department of Mechanical Engineering and Robotics  
& Automation Engineering  
Sahyadri College of Engineering & Management,  
Adyar, Mangaluru 575007, India.**

In association with

**Atria Institute of Technology (AIT), Bengaluru  
Channabasaveswara Institute of Technology (CIT), Gubbi  
Jain College of Engineering (JCE), Belagavi  
Jain Institute of Technology (JIT), Davanagere  
Vidyavardhaka College of Engineering (VVCE), Mysuru**

Date: **7<sup>th</sup> & 8<sup>th</sup> June, 2024**

Mode: **Hybrid**

**SAHYADRI**  
COLLEGE OF ENGINEERING & MANAGEMENT  
An Autonomous Institution  
MANGALURU



## About the Conference:

The International Conference on Intelligent Mobility Systems (ICIMS 2024) is set to convene, bringing together a diverse array of experts and thought leaders in transportation and technology. This virtual event explores the latest advancements and future potential of intelligent mobility systems. Participants from around the globe will have the opportunity to engage in discussions and presentations focusing on innovative solutions for modern transportation challenges.

Key topics to be addressed include the integration of artificial intelligence in transportation systems, the development of autonomous vehicles, and the impact of these technologies on urban planning and sustainability. The Conference will also delve into the ethical and regulatory considerations surrounding intelligent mobility.

Highlighting the importance of collaboration between industry, academia, and government, the Conference is expected to provide valuable insights into how intelligent mobility can reshape how we move and live. With a packed agenda featuring keynote speeches, panel discussions, and interactive sessions, attendees are set to gain a comprehensive understanding of the trends and challenges in intelligent mobility systems.

## Conference Tracks:

The following are only indicative topics. Authors having topics other than those mentioned below are encouraged to choose and apply to the most suitable track.

### Track 1: Intelligent Transportation Systems (ITS)

- Smart Cities and Intelligent Transportation Systems (ITS)
- Public Transport and Mobility as a Service (MaaS)
- The Impact of 5G on Transportation
- Autonomous Vehicle Technologies

### Track 2: Sustainable Transportation and Mobility

- Electric Vehicles and Sustainable Transportation
- Sustainable Power Sources for Future Mobility
- Smart grid infrastructure for transportation
- Automotive electronics for future mobility
- Hardware Design and Materials for future mobility

### Track 3: AI and IoT in Mobility

- Integration of AI and Machine Learning in Mobility
- Innovative Urban Mobility Solutions for Congestion Reduction
- Advancements in Autonomous Vehicle Technology
- IoT in mobility Systems

### Track 4: Cybersecurity in Intelligent Mobility Systems

- Data Security and Privacy in Intelligent Mobility Systems
- Security Frameworks for Intelligent Mobility
- Incident response and analysis of cyber-attacks in mobility
- Digital Forensics in Intelligent mobility

### Track 5: Future Mobility in Industrial Applications

- Drones and Mobile robotics in Industries
- Mobile robotics in agriculture and healthcare
- Future Mobility in Aviation
- Human Factors and User Experience in Intelligent Mobility

## Committee:

Chief Patrons	Dr. Manjunath Bhandary Dr. Vidyashankar S	Chairman, Bhandary Foundation Vice-Chancellor, VTU Belagavi
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Technical Committee	Dr. Venkate Gowda, Professor and Head, Department of Mechanical Engineering, Atria Institute of Technology, Bengaluru.  Dr. Devikannan, Professor and Head, Department of Computer Science & Engineering, Atria Institute of Technology, Bengaluru.	

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Dr. Ramesh R. S, Associate Professor, Department of Mechanical Engineering, JIT, Davanagere.

Dr. Indira. S P, Associate Professor, Department of Computer Science & Engineering, JIT, Davanagere.

Dr. Rajendra Soloni, Associate Professor, Department of Electronics & Communication Engineering, JIT, Davanagere.

Dr. Naveen Kumar H N, Associate Professor, Department of Electronics and Communication Engineering, Vidyavardhaka College of Engineering, Mysuru.

Dr. Ayesha Taranum, Associate Professor, Department of Computer Science & Engineering, Vidyavardhaka College of Engineering, Mysuru.

Dr. Vinod B, Assistant Professor, Department of Mechanical Engineering, Vidyavardhaka College of Engineering, Mysuru.

Prof. Ramesh K G, Dean – Strategic Planning, Sahyadri College of Engineering & Management

Dr. Mustafa Basthikodi, Professor and Head, Department of CSE, Sahyadri College of Engineering & Management

Dr. Rithesh Pakkala P, Associate Professor and Head, Department of ISE, Sahyadri College of Engineering & Management

Dr. Priya Kamath R, Associate Dean - Academics, Sahyadri College of Engineering & Management

Dr. Navaneeth Bhaskar, Associate Dean – R&D, Sahyadri College of Engineering & Management

Prof. Harisha A, Assistant Dean – Innovation, Sahyadri College of Engineering & Management

	<p>Mr. Raghavendra G Shetty, CEO, RDL Technologies, Sahyadri College of Engineering &amp; Management</p> <p>Dr. Keshaveni N, Professor, Department of ME and RA, Sahyadri College of Engineering &amp; Management</p> <p>Dr. Shankara Murthy H M, Associate Professor, Department of ME and RA, Sahyadri College of Engineering &amp; Management</p> <p>Prof. Chandra Singh, Assistant Professor, Department of ECE, Sahyadri College of Engineering &amp; Management</p> <p>Prof. Gurusiddayya Hiremath, Assistant Professor, Department of AIML, Sahyadri College of Engineering &amp; Management</p>	
Organizing Secretary	Dr. Rathishchandra R Gatti	Professor and Head, Department of ME and RA, SCEM
Convener	Prof. Ajith B S	Assistant Dean (IPR), SCEM

## Registration:

	Online	Offline
Students	500 INR	1000 INR
Research Scholars / Faculty	1000 INR	2000 INR
Industry Personnel	2000 INR	3000 INR

## Publications:

All papers will be published in the proceedings of the Conference. The proceedings will not be SCOPUS Indexed.

Extended versions of the selected papers will be **published as book chapters in SCOPUS** recognized publishers at no extra cost. Books will be sent for indexing in SCOPUS and/or WoS.

Paper submission format : Use A4 word copy or LATEX IEEE submission format from here -

<https://www.ieee.org/conferences/publishing/templates.html>

Paper length: 6 to 10 pages, Double column.

**Full Paper Submission link: <https://cmt3.research.microsoft.com/ICIMS2024>**

## Important dates:

Submission starts: **20<sup>th</sup> February, 2024**

Last Date for Paper Submission: **30<sup>th</sup> April, 2024**

Notification of Acceptance: **20<sup>th</sup> May, 2024**

Camera Ready Paper Submission: **30<sup>th</sup> May, 2024**

Last Date for Registration: **2<sup>nd</sup> June, 2024**

Conference Dates: **7<sup>th</sup> and 8<sup>th</sup> June, 2024**

## About the Department:

The Department of Mechanical and Robotics Engineering at Sahyadri College of Engineering and Management was started in the year 2007. Since then, it has produced graduates who are excelling in industries, entrepreneurship and higher studies. The department has been implementing Outcome Based Education (OBE) with Continuous Quality Improvement (CQI) for the holistic development of the students and their future career. The department offers two BE programs – BE in Mechanical Engineering with intake of 60 and BE in Robotics and Automation with an intake of 60. It has doctoral programs affiliated with VTU and holds recognition as a VTU research center. Since its establishment, the department has been actively engaged in research and development (R&D), obtaining R&D grants from esteemed government agencies such as KCTU, AICTE, and VGST. Additionally, it has successfully secured consultancy projects from industries and about 20 patents published from student-faculty collaborations.

## About Sahyadri:

Sahyadri College of Engineering and Management (SCEM), Mangaluru, an Autonomous Institute affiliated to the Visvesvaraya Technological University (VTU), Belagavi, was established in the year 2007 under the Bhandary Foundation. It is one of the premier technological institutions inculcating quality and value-based education through innovative teaching learning process for holistic development of the graduates. The institute has a permanent affiliation for most of the programs, approved by the AICTE & the Government of Karnataka, Accredited by the National Assessment and Accreditation Council (NAAC) with 'A' grade, National Board of Accreditation (NBA) for Five Engineering Programs, and the Institution of Engineers (India) (IE(I)). The institute is recognized under Section 2(f) and 12b of University Grants Commission (UGC) act and as an Innovation Cell by the Ministry of Human Resource Development (MHRD), India. Sahyadri has been accorded with the recognition of Scientific and Industrial Research Organization (SIRO) by the Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology, Government of India. The Institute also houses New Age Incubation Network (NAIN)/k-Tech since 2017 to promote Product Development and Incubation, recognized by MSME as Host Institute (HI) to establish technical Business Incubator (BI) in 2020. The Institute is listed in the top 25 most innovative self-financed private institutions in India by ATAL Ranking of Institutions on Innovation Achievement (ARIIA) 2020 and in band "excellent" in Private Engineering Colleges 2021. The Institute has been awarded 4-star ranking by the MHRD-IIC for three successive years - 2019, 2020 and 2021. Sahyadri has collaborations and networking with many National and International research organizations, Educational Institutions and Industries.

## About Atria Institute of Technology (AIT), Bengaluru:

Spacious 17.5 acre campus with ample trees and greenery in the heart of the silicon city of India-Bangalore. Bangalore City, Cantonment and Yeswanthpur Railway Stations and Central Bus Station are within a 7-kilometer radius of the college. Additionally, the college is on the Expressway to the Airport before the Hebbal Flyover. A prime location in the vicinity of the Indian Institute of Science, University of Agricultural Sciences, GKVK Veterinary Institute, ISRO etc., conducive to a collaborative learning environment. Integrated campus infrastructure for Classrooms, Seminar Halls, Research Centres, Labs and Workshops, Industry Interaction Centre, Separate boys and girls hostels, and Staff quarters for those in need.

## About Channabasaveswara Institute of Technology, Gubbi:

Channabasaveshwara Institute of Technology (CIT), runs under the auspices of Sri Channabasaveshwara Swamy Rural Education Society, was established in the year 2001 with the objective of providing quality technical education. The Institute is affiliated to Visvesvaraya Technological University (VTU), Belgaum, approved by All India Council for Technical Education (AICTE), New Delhi and recognized by Government of Karnataka. CIT is an ISO 9001:2015 Certified institution. CIT is the proud recipient of "Excellent Engineering Institute in Rural India" Award 2016 and "Most Promising Engineering Institution" Award 2018. The Institute is located near Gubbi, Tumkur, around 80 km from Bangalore on National Highway 206. The Campus spreads across 60 Acres of lush green land with beautiful landscaping. The area enjoys pleasant atmosphere throughout the year. Students and staff adore the meticulously maintained campus and welcoming natural surroundings which itself is an inspiration to learn and excel. Students from throughout the nation, from different cultures have chosen CIT as their destination for higher education. The set of shared attitudes, values, goals, and practices that characterizes an institution can be felt within minutes of entering the institute. The College offers, 7 UG programs: Computer Science & Engineering,

Information Science & Engineering, Electronics & Communication Engineering, Electrical & Electronics Engineering, Civil Engineering, Mechanical Engineering, Artificial Intelligence & Data science. 2 PG programs: M.Tech in Computer science engineering, M.Tech in Electronics & 6 Ph.D programmes: Electronics & Communication, Computer Science Engineering, Mechanical Engineering, Electrical & Electronics Engineering, Physics, and Chemistry & Mathematics.1 Management program: Master of Business Administration.

## About Jain College of Engineering (JCE), Belagavi:

Jain College of Engineering (JCE), situated in a sprawling lush, green campus at Belagavi, Karnataka, India was established in 2010 under the umbrella of Jain Group of Institutions (JGI) headquartered in Bangalore. JCE is recognised by All India Council for Technical Education (AICTE), New Delhi, Approved by Directorate of Technical Education (DTE), Karnataka and is affiliated to Visvesvaraya Technological University, Belagavi, Karnataka, India. Five Undergraduate programs in B.E viz., Civil Engineering, Computer Science and Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering as well as Mechanical Engineering and three Post Graduate programs Viz, MBA, MCA and M.Tech (CCT) are offered.

In the quest of imparting quality education, JCE meticulously plans and develops action plans and constantly endeavours to shape the attitude and personality of students to help them emerge as remarkable individuals when they leave the portals of this institution. Civil Engineering and Electrical & Electronics Engineering department are already accredited by National Board of Accreditation (NBA) for a period of three years from 2023 to 2026. The continued excellence of students in the academics is reflected in achieving ranks in the VTU examinations consistently over the years. A few students have brought laurels to our institute by being nominated as "University Blues" in various sports. JCE has tie up with various professional bodies like Institution of Electrical and Electronics Engineering (IEEE), Institution of Engineers (IEI), India, Indian Society for Technical Education (ISTE), Indian Green Building Council (IGBC), Board of IT education Standards (BITES). Numerous activities and events are being conducted both for faculty as well as students under the local chapter of these professional bodies.

## About Jain Institute of Technology, Davanagere:

JIT is one of the best developing engineering colleges of Davanagere and is located adjacent to Pune Bangalore National Highway. It is established in the year 2011, Approved by AICTE, New Delhi, Recognized by Government of Karnataka, affiliated to VTU, Belagavi and Accredited by NBA. JIT is 7 Kms from Davanagere Railway Station. It has lush green campus spread across 16 Acres land, attached with Lake. The Institute has approved by UGC (2f) and possessed 6 well established departmental Research Centers. The Institute has Skill development Labs, got funding sanctioned from PMKY and also has PMKK skill development programs.

The institute offers 6 UG programs, 1 PG program among them Computer Science & Engineering, Electronics & Communication Engineering and Electrical & Electronics Engineering programs are accredited by NBA. The College has excellent infrastructural facilities that include spacious class rooms attached with tutorial rooms, Well-equipped Laboratories, Workshops, Drawing Halls, Seminar Halls, Digital Library, Staff Rooms, Computer Center, Browsing Centre with high speed internet connectivity, Girls & Boys Common Room, Canteen, Transportation and reprographic facility to the students etc, well experienced & dedicated faculty members, a strong students mentorship program.

## About Vidyavardhaka College of Engineering, Mysuru:

Vidyavardhaka College of Engineering is one of the prestigious engineering colleges in Karnataka. Established in 1997, VVCE has grown in leaps and bounds since inception. VVCE is an autonomous institute affiliated to Visvesvaraya Technological University (VTU), Belagavi, approved by AICTE & UGC, New Delhi, and recognized by Govt. of Karnataka. Six UG programs are accredited by the National Board of Accreditation, New Delhi, and NAAC with an "A" grade. VVCE offers Seven UG programs, Three PG programs, and Nine Research Centers for pursuing Ph.D. programs, with a total student population of over 4200. VVCE offers Three UG and One PG programs to working professionals, Since 2023. The college has excellent infrastructure coupled with a qualified and passionate faculty team to provide a perfect learning ambience. In 2022, VVCE secured a position in the 251-300 rank band in the NIRF rankings under the engineering category. VVCE received a gold rating and the Institute of Happiness award from QS-I gauge in 2022. The college is under the able leadership of Dr. B Sadashive Gowda, Ph.D(IISC) as Principal, who has rich experience in industry and education fields both in India and abroad.



Educating the young minds.  
Training the Technocrats.  
Empowering the Engineers.

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*Empowering Young Minds*



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