



# IEEE ITSS Winter School on Computing & IoT Technologies for Mobility in 2-Wheelers and Electric 2-Wheelers



**Date:** 7 - 9 December 2023  
(Thursday -Saturday)

**Register Now**

<https://forms.gle/RApd6muMZ7PTYTQeA>

## Organised By:

Indian Institute of Information Technology (IIIT)  
Sri City, AP, India - 517646  
and  
Ahmedabad University, Gujarat, India

## Hosted By:

Indian Institute of Information Technology (IIIT)  
Sri City, AP, India - 517646

**For more info visit our Website:**

<http://ieee-itss-2-wheeler-mobility.com/>

(Event - 3)



## About the Event

Embrace the Opportunity to be part of Winter School on Computing and IoT.

Detailed talks on state-of-the-art Information and Communication Technology (ICT) based solutions to promote two-wheeler safety in developing countries (especially R10).

1. Demonstrating technical features
2. Identifying research challenges and
3. Bringing in social awareness about the importance in society.

Limited opportunity: Intended audience are

- Bright UG students
- PhD and PG researchers
- Industry professionals
- young faculties

**Don't miss this opportunity to enhance your skills and expertise**



## Event - Schedule

### Topics of Winter School

#### > Day-1 : (2 pm - 8 pm)

##### **Introduction to 2-wheeler Mobility**

- Road Safety
- Technical Challenges
- Safe Driving in India, South Asia/Less-Disciplined Traffic Roads
- ICT and IoT-based advancements
- Quality and Cost-effective Solution

#### > Day-2 : (9 am - 6 pm)

##### **Computing and IoT Technologies**

- Connectivity and Communication 2V,V21 and V2X Communication
- IoT integration for Sensor Monitoring-Navigation and Route Optimization
- Image Processing and Computer Vision-based Solutions
- Data Analytics for Vehicular Safety and Semi-Autonomous Driving in 2-wheeler
- AI/ML for Semi-Autonomous 2-wheelers
- Ride-Sharing and Mobility Services
- Path Planning and Mobility Services
- Integration with Multi-Modal Traffic

#### > Day-3 : (9 am - 1 pm)

##### **Technologies for Electric Two-Wheelers**

- Introduction(Types, range, anxiety, cost, why today, challenges and barriers, etc.
- Fast Charging and Battery Management Systems
- Electric Vehicles and Renewable Energy Integration
- Wireless Charging Technologies
- Multi-Sensor Fusion and Integration
- Application extension to Drones (UAV), AUV, etc.

**Registration Fee : 500/- only**

**Food and Accomodation will be provided**

**Contact**

Email : [stas@iiits.in](mailto:stas@iiits.in)

**Student Co-ordinators:**

**Vidyasagar - 7337471142**  
**Jahnavi - 8639719415**

## Speakers



**Dr. Selvajothi**  
- IIT design and  
Manufacturing Kancheepuram



**Mr. Mohan Satyaranjan**  
- Entrepreneur, Connected  
Systems



**Mr. Giridhar Joshi**  
- Entrepreneur, Connected  
Systems



**Mr. Ashutosh Upadhyay**  
- Liger Mobility



**Dr. Ramesh Singh**  
- Analysis and Design of  
Electric Vehicles



**Dr. Jaswanth Nidamanuri**  
- Woxsen University



**Dr. Jayant Kumar**  
- Tokyo, Japan



**Dr. Naveenkumar Marati**  
- Hitachi Energy



**Mr. Aftab M. Hussain**  
- IIT Hyderabad



**Mr. John AR**  
- Entuple E-Mobility  
Private Limited



**Mr. Adrustavantha R**  
- Power Electronics,  
Electric Vehicles



**Mr. Anbumani  
Subramanian**  
- Intel

## Event Organisers



**Dr Hrishikesh Venkataraman**  
- IIT Sri City



**Dr Maryam Kaveshgar**  
- Ahmedabad University



**Prof. Mehul S Raval**  
- Ahmedabad University