



ICICC-2024

7th International Conference on Innovative Computing and Communication

Organized by Shaheed Sukhdev College of Business Studies, University of Delhi, New Delhi, India, in association with National Institute of Technology, Patna & University of Valladolid, Spain, On 16-17th, February 2024.

******* CALL FOR PAPERS *******

SPECIAL SESSION ON

Intelligent Applications and Contemporary Business Prospects for Autonomous Vehicles

SESSION ORGANIZERS:

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SESSION DESCRIPTION:

In recent years, the world has seen substantial advances in Artificial Intelligence (AI), resulting in the growing usage of Computer Vision applications. The development of computer vision technology has led to new businesses like self-driving cars and the Metaverse leading to an opportunity for several technologies to converge. Autonomous vehicles are those which can operate themselves without human intervention. They use Computer Vision to interpret their environment and make decisions about how to navigate. By utilizing object detection and tracking algorithms and with the right usage of cameras and sensors, these vehicles can operate seamlessly making the overall driving experience simpler. Autonomous cars also need to communicate with each other for safety purposes. VANET stands for Vehicular Ad-hoc Network, which provides wireless communication service between vehicles and roadside units. VANETs are used to provide road safety, navigation, and other critical services. They can also enhance the connectivity and performance of autonomous vehicles by sharing data and information such as location, telemetry data, and safety warnings. By deploying VANETs the safety and efficiency of self-driving cars can be improved. Immersive technologies can be leveraged to simulate and improve autonomous vehicles. Virtual Reality (VR), a visual simulation technology, can be employed to train and test these vehicles in real-road settings. Using VR, developers can cover multiple cars over thousands of virtual miles at the same time with zero fuel which potentially reduces the carbon emission on the planet by reducing the need to conduct long test drives for the same.

The objective of this special session is to bring together interdisciplinary research groups across the world which includes industrialists, researchers, academicians and students to discuss and explore the applications and challenges and also to showcase the latest advancements, novel concepts, methodologies, and algorithms related to these technologies. It is also expected that self-driving cars will become common in the marketplace in less than a decade. Therefore, exploring the business prospects of these technologies and the development of the hardware and software associated with their operation and business strategies is crucial. Using research innovations in VANETs, AI, Computer Vision and Machine Learning, safer and smarter cars can be developed, leading to a more sustainable, accident-free and intelligent transportation world.

RECOMMENDED TOPICS:

Topics to be discussed in this special session include (but are not limited to) the following:

- Advances and Applications of Computer Vision in Electronics
- Computer Vision and Machine Learning for Autonomous Driving
- Computer Vision Applications in Self-Driving Cars.
- Autonomous vehicles in Vehicular Ad-hoc Networks (VANET)
- Securing Communication of Autonomous Vehicles with Artificial Intelligence
- Metaverse as a Testbed for Computer Vision Systems in Autonomous Vehicles
- Object detection for autonomous vehicles
- Multi-camera vision and depth estimation
- Stereo vision, Semantic Instance Segmentation
- Autonomous Vehicular Networks: Perspective and Open Issues
- Augmented and Virtual Reality simulation using game engines.
- Computer Vision Problems: Recognize Objects, 3D Map Creation, Deployment of Airbags, Tracking of Cars, Lane line Detection, Low light mode driving and Data for Training.
- Large Language Models in Autonomous Driving.

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme session on **Intelligent Applications and Contemporary Business Prospects for Autonomous Vehicles on or before [30th October 2023]**. All submissions must be original and may not be under review by another publication. INTERESTED AUTHORS SHOULD CONSULT THE CONFERENCE'S GUIDELINES FOR MANUSCRIPT SUBMISSIONS at http://icicc-conf.com/paper_submission.html. All submitted papers will be reviewed on a double-blind, peer-review basis.

NOTE: While submitting a paper in this special session, please specify [**Session Name**] at the top (above paper title) of the first page of your paper.

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