ICMEET – 2024

Call for Papers

Special Session on

AI-Driven Computer Vision for Smart Systems in Micro-Electronics and Telecommunications

Session Chair(s):

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Theme of Session:

As the integration of artificial intelligence (AI) with traditional fields like micro-electronics and telecommunications accelerates, AI-driven computer vision systems are playing an increasingly pivotal role in shaping next-generation smart systems. The rise of AI-powered visual perception technologies, particularly through neural networks, is transforming how devices interact with the physical world, enabling more efficient, real-time decision-making across a variety of applications.

This special session will focus on how AI-driven computer vision is revolutionizing smart systems in micro-electronics and telecommunications. By leveraging neural networks and advanced machine learning techniques, these systems are being optimized to perform complex visual perception tasks, such as object detection, recognition, and tracking, in a variety of environments, including edge devices, IoT networks, and telecommunication infrastructure.

Topics of Interest:

Based on the above-mentioned theme, the topics of interest are (but not limited to):

1. Edge AI for Real-Time Visual Perception in Telecommunications Networks
2. Low-Power Neural Networks for Image Processing in Embedded Systems
3. Neural Networks for Smart Surveillance in 5G-Enabled Cities
4. AI-Driven Computer Vision for Autonomous Drones and Robotics
5. Efficient Convolutional Neural Networks for Visual Perception in IoT Devices
6. Vision Transformers for Enhanced Image Recognition in Smart Devices
7. AI-Powered 3D Object Detection for Robotics and Smart Vehicles
8. AI-Driven Visual Analytics for Optimizing Telecommunication Networks
9. AI-Enhanced Visual Perception in Smart Grids and Energy Systems
10. AI-Based Object Detection and Recognition for Real-Time Traffic Management
11. AI-Powered Visual Perception for Augmented Reality (AR) in Telecommunications
12. Transfer Learning for Specialized Computer Vision Tasks in Embedded Systems
13. AI-Driven Facial Recognition in Secure Telecommunications Systems
14. Neural Networks for AI-Powered Image Compression in Telecommunication Systems
15. Real-Time Scene Understanding for Smart Cameras in Public Safety Systems
16. Hybrid AI Architectures for Enhanced Visual Perception in Low-Latency Telecommunications Applications
17. AI for Image and Video Analytics in Smart Home Systems
18. AI-Powered Visual Perception in Smart Manufacturing: Quality Control and Automation
19. Neural Network-Based Visual Perception for Environmental Monitoring in IoT Networks
20. AI-Powered Visual Perception for Underwater and Aerial Drones
21. Real-Time Gesture Recognition Using AI in Human-Machine Interfaces

Important Dates

Submission of Full Manuscripts: 31st Oct 2024

Notification of Acceptance   :Starts from 10 November 2024

Registration & CRC Submission: 20 November 2024

Conference Schedule: 5 December 2024

Conference Dates: 19-20 December 2024 [19 December 2024 (Physical Mode) & 20 December 2024 (Online Mode)]

Paper Submission Process:

Please submit your paper (in word & pdf format) at Email: **nitritconference@gmail.com** "**Special Session- AICVSS**" mentioned in the subject line.

For any further queries related to this special session, please contact the session chairs at:
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