



**International Conference on Innovations in Data Analytics  
(ICIDA 2024)**

*Organized by  
Eminent College of Management and Technology (ECMT)*

*Technically Sponsored by:  
Scientific Innovation Research Group (SIRG), Egypt  
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**Date: 18<sup>th</sup> – 19<sup>th</sup> December, 2024 (Hybrid Mode)**

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

**SPECIAL SESSION**

**Edge Computing and Artificial Intelligence for Autonomous Applications**

**SESSION ORGANIZERS:**



**Dr. Deepa Jose**

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**SESSION DESCRIPTION:**

AI and Edge Computing technology can provide significant enhancement to automation. The Autonomous Industry remains among the fastest to adopt the AI and Edge Computing Technologies. Integrating AI and Edge Computing for autonomous solutions presents profound and promising aspects by improving speed, quality, reliability, handling large amount of data, effectiveness, and accessibility of autonomous service to the society. Locating edge devices closer to sensing devices in IoT applications for autonomous can reduce the response time and communication overhead. In addition, the increasing availability of real time data and rapid development of big data analytic methods has made possible the recent successful applications of AI and edge computing in autonomous systems. The number of connected devices for edge computing, the tremendous amount of data collected from sensors, data security and interoperability are challenges to manage.

Constant changes in hardware and connectivity technology, data overload and accuracy are also a set of challenges. Hence it is the need of the hour to survey the current status of AI and Edge Computing applications in autonomous and discuss its future.

### RECOMMENDED TOPICS:

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

- Hardware/Software co-design for Edge Computing
- FPGA for Edge Computing
- Deep Learning systems for prediction
- Robotic Automation
- Hybrid Optimization Algorithms
- AI, Informatics and Security for autonomous Systems
- Signal and Image Processing for autonomous applications
- Integration of AI and Edge Computing
- Sensor development and design for edge devices
- IoT for Autonomous Applications
- Federated Learning
- Security and Federated Learning
- Integrating AI and IoT for autonomous
- Architecture design, frameworks, and protocols
- Mission-critical edge-based autonomous applications
- Big Data Mining for Automation
- Information Security in Edge devices
- 6G solutions for Edge Computing
- Cyber-Physical systems for Edge Devices
- Adhoc Wireless Sensor Networks
- Quantum Computing for autonomous systems
- Connectivity Technologies for Edge Computing
- AI for automated tracking devices
- Big Data Technologies for Automation
- Novel Hybrid Algorithms for optimization
- AR and VR for Autonomous Systems
- Automation in Industry 5.0

### PUBLICATION AND SUBMISSION PROCEDURE

The conference aims at carrying out double-blind review process. The papers submitted by the authors will be assessed based on their technical suitability, the scope of work, plagiarism, novelty, clarity, completeness, relevance, significance, and research contribution. The conference proceedings will be published in **Springer LNNS Series (Scopus)**.

Website: <http://icida.ikrf.in>

Submission Link: <https://cmt3.research.microsoft.com/ICIDA2024>

Submission Deadline: **30<sup>th</sup> September, 2024**

**NOTE: While submitting the paper in this special session, please specify [Edge Computing and Artificial Intelligence for Autonomous Applications] at the top (above paper title) of the first page of your paper.**

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