**22nd IEEE International Conference on Industrial Informatics (INDIN), August 17-20, 2024, Beijing, BJ, China**

**Special Session on**

Key Techniques of the Operating Systems for the Intelligent Connected Vehicles

# Organized by

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# Call for Papers

**Theme**: Design and Optimization of Multi-Core Operating System Architecture for Intelligent Connected Vehicles

With the rapid development of intelligent connected vehicles, more and more vehicle systems need to handle complex computational tasks and real-time data processing. In order to meet these requirements, vehicle systems usually adopt multi-core processors as their computing platforms and use specially designed multi-core operating systems to manage and schedule tasks. This special session aims to bring together researchers and practitioners to discuss the latest advancements and innovations in the design and optimization of multi-core operating system architecture for intelligent connected vehicles.

Topics of interest include, but are not limited to:

1. Multi-core operating system designs for intelligent connected vehicles.
2. Real-time and safety-critical operating systems for automotive applications.
3. Virtualization and containerization technologies for multi-core systems in vehicles.
4. Task scheduling mechanisms for multi-core operating systems in intelligent connected vehicles.
5. Power management techniques for efficient resource allocation in multi-core systems.
6. Performance analysis and optimization techniques for multi-core operating systems.
7. Middleware and communication protocols for intelligent connected vehicle systems.
8. Testing and validation strategies for multi-core operating systems in automotive domain.