



# ANNUAL CONFERENCE OF THE IEEE INDUSTRIAL ELECTRONICS SOCIETY

Chicago | Illinois, November 3-6, 2024

Special Session on

## Advanced Artificial Intelligence Algorithm in Transportation Electrification

Organized and co-chaired by:

Prof. Minghao Zhou, Harbin University of Science and Technology, China

Prof. Wei Xu, Huazhong University of Science and Technology, China

Prof. Chaoxu Mu, Tianjin University, China

Prof. Yong Feng, Harbin Institute of Technology, China

Prof. Abdul Khaliq Junejo, Huazhong University of Science and Tech., China

[zhouminghao@hrbust.edu.cn](mailto:zhouminghao@hrbust.edu.cn)

[weixu@hust.edu.cn](mailto:weixu@hust.edu.cn)

[cxmu@tju.edu.cn](mailto:cxmu@tju.edu.cn)

[yfeng@hit.edu.cn](mailto:yfeng@hit.edu.cn)

[ak.junejo@gmail.com](mailto:ak.junejo@gmail.com)

## Call for Papers

### Technical Outline of the Session and Topics:

The transportation electrification has the advantages of low noise and zero emissions, which determine the rapid development and broad prospects of the new energy vehicles. How to enhance the controlling stability and safety of vehicle systems under complex disturbances is the main challenge and frontier issue faced by electric-driven vehicles. In the past decade, the artificial intelligence (AI) has become a powerful tool in unmanned driving, intelligent electric drive control, intelligent fault diagnosis because of its ability to capture long-range dependencies in sequence data and insight into the dynamics during the operation process. Extensive efforts have been made for the AI to obtain better dynamic performance, higher control accuracy and safer drive experience. Thus, this special session aims to show the latest achievement with the combine of artificial intelligence and the field of traffic electrification.

### Topics of the Session include, but are not limited to:

- Intelligent algorithms.
- Intelligent control systems.
- Multi-agent systems.
- Control methods for unmanned systems.
- Deep learning, reinforcement learning and autonomous robots.
- Vehicle-road cooperative control.
- Intelligent fault monitoring and life prediction.
- Path tracking of intelligent electric vehicles.
- Intelligent ePowertrain.
- Industrial intelligent control and intelligent manufacturing.

### Author's schedule:

Deadline for submission of special session papers

April 15, 2024

Notification of acceptance

June 10, 2024

Deadline for submission of final manuscript

July 01, 2024

Early submission is highly encouraged for early decision notifications!

All the instructions for paper submission are included in the conference website:

[www.iecon-2024.org](http://www.iecon-2024.org)



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