



2025 IEEE International Conference on Intelligent Rail Transportation

Oct. 11th-12th, 2025, Beijing, China

CALL FOR PAPERS

2025 IEEE International Conference on Intelligent Rail Transportation (IEEE ICIRT 2025) will be held on October 11-12, 2025 in Beijing, China. The conference is sponsored by the IEEE Intelligent Transportation Systems Society, Beijing Jiaotong University, Lanzhou Jiaotong University, State Key Laboratory of Advanced Rail Autonomous Operation, National Engineering Research Center of Rail Transportation Operation and Control System. And it is organized by Beijing Jiaotong University. The theme of IEEE ICIRT 2025 is “**Artificial Intelligence in Railway Operation**”. Experts will be invited to give frontier lectures, make speeches in group and discuss ideas freely. The aim is to provide an open platform for the scholars in the technologies, theories and engineering applications of rail transportation to carry out academic exchanges.

IEEE ICIRT has been successfully held since 2011. It is a forum for scientists and engineers working in academia, industry and government to present their latest research findings and engineering experiences in application of “New Technologies to Improve railway capacity, Carbon emission, Cost and Customer satisfaction”. It aims to use innovative theoretical approaches and emerging technology development on the rail network to improve line operational efficiency, enhance overall passenger experience, and help railway operators achieve economic viability in the long run. Furthermore, it encourages ideas and best practices from fields such as computer science, engineering, mathematics. This cross-disciplinary approach fosters the development of holistic solutions that tackle the multifaceted challenges facing the railway industry today.

The submission topics for this ICIRT conference include but are not limited to:

- Autonomous System
- Intelligent Dispatching
- Virtual Coupling and Train Fleeting
- Hybrid Intelligence in Railway
- Intelligent Perception for Railway
- Security of Train Control System
- Safe and Trustworthy AI in Railway
- Emergency Management of Railway
- Cloud Computing for Railway
- Testing Technology for Train Control System
- Electromagnetic Compatibility for Railway
- Safety and Reliability of Railway
- Intelligent Fault Detection and Diagnosis in Railway
- Computer Simulation and Digital Twin for Railway
- Human Factors and HMI for Intelligent Rail Transportation
- New Trends and Emerging Technologies for Intelligent Rail Transportation

PAPER SUBMISSION

Complete manuscripts must be submitted through PaperCept Conference Management System (<https://its.papercept.net/conferences/scripts/start.pl>). Upon acceptance, authors will be required to register and present their papers at the conference. For further information, please refer to the conference website www.ieee-icirt.org/2025 or contact us via email ieee_icirt@163.com.

IMPORTANT DATES

- **Deadline for Paper Submissions** **June 1st, 2025**
- **Notification of Paper Acceptance** **June 30th, 2025**
- **Submission of Final Paper** **July 15th, 2025**
- **Conference Dates** **Oct. 11th-12th, 2025**



Sponsors: IEEE Intelligent Transportation Systems Society, Beijing Jiaotong University, Lanzhou Jiaotong University, State Key Laboratory of Advanced Rail Autonomous Operation, National Engineering Research Center of Rail Transportation Operation and Control System
Locally Organized by: Beijing Jiaotong University