



Call for Papers: Special Session

SS4: Artificial-Intelligence-Enabled Planning, Analysis and Control of Electric Mobility Resources (Land, Sea & Air) (AI-PACER)

Organizers

About the Session

The transportation sector is rapidly transitioning toward electrification across road vehicles, marine vessels, and aircraft, introducing challenges in planning, energy management, reliability, resilience, and coordinated control. The AI-PACER Special Session focuses on applying data-driven analytics, artificial intelligence, and soft-computing techniques to address these challenges, enabling efficient V2G/V2X energy transactions, smart fleet coordination, cyber-secure communication, and grid-interactive control for electric mobility systems across land, marine, and aviation domains.

Topics of the Session include, but are not limited to

- ✓ Data-driven optimal planning of EV charging Ecosystem
- ✓ Planning, management and control of all electric/ multi-energy ships
- ✓ AI-enabled reliability and resiliency enhancement of e-mobility ecosystem
- ✓ Intelligent fleet scheduling and navigation
- ✓ Health diagnosis, aging prediction, second life estimation and lifecycle optimization of e-mobility batteries
- ✓ AI-enabled control of grid-connected or islanded e-mobility micro/nanogrid
- ✓ Digital twins, IoT, and sensor-based prognostics
- ✓ Integration of electric mobility with renewable-rich grids and smart cities
- ✓ Physics informed learning for e-mobility resource management
- ✓ AI-based Fault Detection and System Monitoring

Paper Submission Deadline: 31st Jan 2026

Submission

<https://cmt3.research.microsoft.com/SEFET2026/Submission/Index>

Conference Website: <https://vnit.ac.in/sefet26/index.html>



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* All presented papers will be considered for further review and publication in IEEE Transactions on Industry Applications and IEEE Industry Applications Magazine.