

Special Issue

Advanced Machine Learning and AI Techniques for Winter Weather Traffic Modelling in Cold Region Highways

Message from the Guest Editor

This Special Issue encompasses a broad range of topics related to winter weather traffic modeling in cold regions. The scope includes, but is not limited to, the following:

- **Predictive Models:** Development and evaluation of machine learning models for predicting traffic flow, congestion, and travel times under winter weather conditions.
- **Real-time Traffic Management:** AI application for real-time traffic monitoring, incident detection, and decision making during adverse weather events.
- **Weather-Integrated Traffic Data:** Methods for integrating meteorological data with traffic data to enhance the accuracy and reliability of traffic models.
- **Safety Enhancements:** AI-driven solutions for improving road safety, reducing accidents, and mitigating the impact of winter weather on highway users.
- **Case Studies:** Practical examples and success stories of machine learning and AI applications in winter weather traffic management and modeling.
- **Comparative Analysis:** Comparative studies of different machine learning techniques and their effectiveness in modeling winter weather traffic scenarios.

Guest Editor

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Message from the Editor-in-Chief

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