# **Special Issue**

# Advanced Machine Learning and Al 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: Al application for realtime 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: Al-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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### Deadline for manuscript submissions

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### Editor-in-Chief

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