

Learning Traffic Anomalies from Generative Models on Real-Time Observations

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Abstract : This study focuses on detecting traffic anomalies using generative models applied to real-time observations. By integrating a Graph Neural Network with an attention-based mechanism within the Spatiotemporal Generative Adversarial Network framework, we enhance the capture of both spatial and temporal dependencies in traffic data. Leveraging minute-by-minute observations from cameras distributed across Gothenburg, our approach provides a more detailed and precise anomaly detection system, effectively capturing the complex topology and dynamics of urban traffic networks.

Keywords : traffic, anomaly detection, GNN, GAN

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