

POSTGRADUATE SEMINAR SERIES

Topic Defence Seminar

Topic Title: Prediction of Passenger Out-Flow of Shenzhen Metro Based on Real-Time In-Flow Information

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Abstract : Urban metro systems are pivotal in supporting city infrastructures, especially as urbanization intensifies globally. Effective management and optimization of passenger flows in metro stations are crucial due to their inherently complex nature influenced by various factors such as weekdays, weekends, public holidays, and seasonal changes.

This study aims to develop a sensitive and precise spatial-temporal model to capture the full-state passenger dynamics within metro rail networks for predicting passenger flow in metro stations. By leveraging historical passenger data and accounting for various influencing factors, the research intends to unveil the primary drivers behind passenger flow fluctuations and utilize this insight to forecast future trends, thereby improving the overall efficiency and management of metro systems.

The dataset is the Shenzhen Metro Corporation (SMC) network as of 2013, which consists of 5 lines and 118 stations. It utilizes Automatic Fare Collection (AFC) data from a 116-day period

Date : 17 June 2024, Monday
Time : 8:30 am – 11:30 am
Venue : SEK106, 1/F, Simon & Eleanor Kwok Building
Language : English



*** All are Welcome ***