Advances in Intelligent Traffic Management

From Reinforcement Learning to Digital Twins

Friday, October 13
9:00 AM – 12:30 PM
MechEng MD267 (Seminar Room)
2nd Floor, MacDonald Engineering Building
McGill University

Opening Session

9:00–9:10 AM **Prof Luis Miranda-Moreno:** Welcome and Introduction

Presentations Session 1

9:10–9:40 AM	**Prof Masao Kuwahara**, Tohoku University, Japan. Decentralized Network-wide signal control by multi-agent reinforcement learning based on decomposition of Markov decision process
9:40–10:10 AM	**Prof Toshio Yoshii**, Ehime University, Japan. Effective traffic safety measures under the traffic condition with high accident risk.
10:10–10:40 AM	**Prof Edward Chung**, Hong Kong Polytechnic University. Network wide traffic volume prediction via clustering and deep learning with limited data.

Coffee Break (10:40–11:00 AM)

Presentations Session 2

11:00–11:30 AM	**Prof Lijun Sun**, McGill University *Bayesian calibration and stochastic simulation of car-following models.*
11:30–12:00 PM	**Dr Ryota Horiguchi**, i-Transport Lab. Co., Ltd. *Building transport digital twin based on the online simulation framework.*
12:00–12:30 PM	**Prof Wenyi Xia**, HEC Montréal *A structural estimation of airport ground transportation mode choice using aggregate data.*

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