

Seminar Series #1

Collective Impact in Transportation Systems

(169th TAOYAKA Program Seminar)

Date: Feb. 2 (Tue), 2021
Time: 6:00 - 8:00am (JST)
Place: online (zoom)
Language: English

6:00-7:00 Invited talk:

Leveraging Machine Learning to Plan Innovative Mobility Systems

By Dr. Xilei Zhao (University of Florida)

Abstract:

The exponential growth of ridesourcing services, such as Uber and Lyft, has been disrupting the transportation sector and changing how people travel. As ridesourcing continues to grow in popularity, being able to accurately predict the ridesourcing demand is essential for effective land-use and transportation planning and policymaking. In this talk, I will discuss how my research team leverages the state-of-the-art machine learning techniques to forecast ridesourcing demand in the City of Chicago. In particular, I will introduce a novel approach, called Clustering-aided Ensemble Method (CEM), which significantly outperforms all the popular benchmarks in the field. Next, I will discuss interpretable machine learning, an emerging area in Artificial Intelligence, and how it can be applied to peek into the black-box travel behavior models to generate rich insights for planning innovative mobility systems.

7:00-8:00 Research talks:

Modeling Short- and Long-term Influence of E-hailing Services on Regional Public Transit

By Dr. Keiichiro Hayakawa (Toyota Central R&D Labs., Inc.)

Machine Learning for Traffic Prediction During Disaster Situation: Discussions on Accuracy and Interpretability

By Dr. Varun Varghese (Hiroshima University)

Registration:

<http://bit.ly/3pnqcFs>

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