



# Data-Driven Modeling and Optimization Methods for Current and Future Airspace Users

Date: 22 March 2024 (Friday)

Time: 10:00am - 11:00am

Venue: Room 2308, Li Dak Sum Yip Yio Chin Academic Building, City University of Hong Kong

## ABSTRACT

The Laboratory for Air Transportation, Infrastructure, and Connected Environments (LATTICE), situated in the Department of Aerospace Engineering at the University of Michigan, Ann Arbor, is focused on identifying and addressing research problems that contribute towards a safer, more efficient, more resilient, as well as user- and equity-oriented air transportation system and other societal-scale infrastructures. In this presentation, I will cover some ongoing and recently completed projects at LATTICE, spanning methods such as stochastic/robust optimization, bandit (exploration/exploitation) strategies, combinatorial programs (e.g., facility location problems, vehicle routing problems), reinforcement learning, and probabilistic privacy, applied to a variety of settings ranging from air traffic management, UAS traffic management, and space systems/infrastructures. The overarching goal of my presentation is to solicit feedback and spur discussions, potentially leading to new and exciting interdisciplinary and international collaborations.



## Professor Max LI

### GUEST SPEAKER'S PROFILE

Professor LI is an Assistant Professor of Aerospace Engineering at the University of Michigan, Ann Arbor. He also has courtesy appointments in Civil and Environmental Engineering as well as Industrial and Operations Engineering. He received his PhD in Aerospace Engineering from the Massachusetts Institute of Technology in 2021. He earned his MSE in Systems Engineering and BSE in Electrical Engineering and Mathematics, both from the University of Pennsylvania, in 2018. His research and teaching interests include air transportation systems, airport and airline operations, Advanced Air Mobility, networked systems, as well as optimization and control.