The Hong Kong University of Science and Technology Dept of Information Systems, Business Statistics and Operations Management

Workshop



Machine Learning Meets Operations (and vice versa...)

by

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Date : Jan 8 (Mon), 9 (Tue), 10 (Wed), 12 (Fri) and 15 (Mon), 2024

Time : 9:30 am - 12:30 pm

Venue : Case Room 1003, LSK Business Building

Description: As data becomes increasingly abundant, accessible, and a major driver of economic activity, significant attention has focused on machine learning tools for addressing a variety of data-driven decision making problems, including variations on traditional operations research problems. In this sequence of lectures, we will present some vignettes of research questions that involve ideas and tools from machine learning that are blended into operations-type settings. In particular, we will highlight some concepts that are relevant both to problem formulation as well as solution methodology, and draw (hopefully) interesting connections to practical problem settings and application domains.

Bio: Assaf Zeevi is Professor and holder of the Kravis chair at the Graduate School of Business, Columbia University. His research and teaching interests lie at the intersection of Operations Research, Statistics, and Machine Learning. In particular, he has been developing theory and algorithms for reinforcement learning, Bandit problems, stochastic optimization, statistical learning and stochastic networks. Assaf's work has been applied in online retail, healthcare analytics, dynamic pricing, recommender systems, and social learning in online marketplaces. Assaf received his B.Sc. and M.Sc. (Cum Laude) from the Technion, in Israel, and subsequently his Ph.D. from Stanford University. He spent time as a visitor at Stanford University, the Technion and Tel Aviv University. He is the recipient of several teaching and research awards including a CAREER Award from the National Science Foundation, an IBM Faculty Award, Google Research Award, as well as several best paper awards including the 2019 Lanchester Prize. Assaf has recently served a term as Vice Dean at Columbia Business School and Editor-in-Chief of Stochastic Systems (the flagship journal of INFORMS' Applied Probability Society). He also serves on various other editorial boards and program committees in the Operations Research and Machine Learning communities, as well as scientific advisory boards for startup companies in the high technology sector.