The Hong Kong University of Science and Technology
Dept of Information Systems, Business Statistics and Operations Management
Dept of Industrial Engineering & Decision Analytics
Joint Seminar Announcement

Contextual Optimization:
Bridging Machine Learning and Operations
by
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Date	:	**22 October 2021 (Friday)**
Time	:	**10:30 - 11:45 AM**
Zoom ID	:	**940 9210 1521 (passcode 801626)**

Abstract:

Many operations problems are associated with some form of a prediction problem. For instance, one cannot solve a supply chain problem without predicting demand. One cannot solve a shortest path problem without predicting travel times. One cannot solve a personalized pricing problem without predicting consumer valuations. In each of these problems, each instance is characterized by a context (or features). For instance, demand depends on prices and trends, travel times depend on weather and holidays, and consumer valuations depend on user demographics and click history. In this talk, we review recent results on how to solve such contextual optimization problems, with a particular emphasis on techniques that blend the prediction and decision tasks together.

Bio:

Dr Adam Elmachtoub is an Associate Professor of Industrial Engineering and Operations Research at Columbia University, where he is also a member of the Data Science Institute. His research spans two major themes: (i) designing machine learning and personalization methods to make informed decisions in industries such as retail, logistics, and travel (ii) new models and algorithms for revenue and supply chain management in modern e-commerce and service systems. He received his B.S. degree from Cornell and his Ph.D. from MIT, both in operations research. He spent one year as a postdoc at the IBM T.J. Watson Research Center working in the area of Smarter Commerce. He has received an NSF CAREER Award, an IBM Faculty Award, and was on Forbes 30 under 30 in science.

All interested are welcome!
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