Bridging the Gap Between Causal Inference and Machine Learning
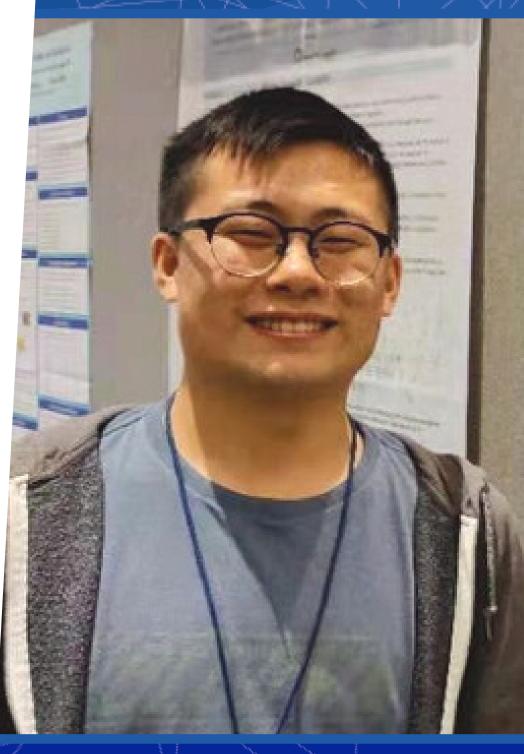
Date: 19 March 2021 (Friday)

Time: 10am - 11am

Seminar link: https://cityu.zoom.us/j/91661200746

ABSTRACT

Causal inference and machine learning have been studied as two separate areas for a long time. Only recently, researchers start to explore the connections between them. A natural question can be asked: how can we build connections between causal inference and machine learning? I will answer this question in two directions: (1) solving causal inference problems with advanced machine learning techniques and (2) enhancing machine learning models with causal knowledge. For the first direction, I will introduce graph neural network based causal inference methods that leverage auxiliary network information of the data to mitigate confounding bias. For the second direction, I will present how novel inductive bias can be designed based on causal knowledge to improve the generalizability of machine learning models.

Dr Ruocheng GUO
GUEST SPEAKER'S PROFILE

Dr Ruocheng Guo is a final year Ph.D. candidate at Arizona State University under the supervision of Professor Huan Liu. His research lies in causal inference, machine learning, and data mining. He was the recipient of the 2020 ASU CIDSE Doctoral Fellowship. He was an AI resident at Google X, and a research intern at Microsoft Research AI and Etsy. He received his MSc degree from the Hong Kong University of Science and Technology and his BEng degree from Huazhong University of Science and Technology.

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All are welcome