



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

PHD STUDENT SEMINAR

Robo-Advisor in DeFi

By

Miss Zhishuang CHEN

Abstract

Decentralized Finance, DeFi, is a transparent and open ecosystem backed by blockchain network. DeFi can provides same services as any financial institutions through digital assets, smart contracts, protocols. The absence of middlemen and location limitation save users time and cost. Although the Crypto world expand explosively, DeFi still has a certain threshold to get start. Then the Robo-Advisory can be a bridge for better satisfying the demands of users.

The Robo-advisory is composited by feature learning and recommendation system. The disentangled representation learning, Generative Adversarial Networks (GAN), Encoder -Decoder are adopted in extract users' and product's features for generating personally recommendation. Then multi-objective collaborative filtering is considered in recommendation system to detect user's preference, which can simultaneously optimize the accuracy, diversity and novelty. As the aim of providing decent trading suggestion, the Robo-advisory also take price prediction into account through supervised learning, semi-supervised learning and reinforcement learning.

Date : 22 May 2021 (Saturday)

Time : 7:00pm

Zoom Meeting : <https://hkust.zoom.us/j/92180189935> (Passcode: 136071)

All are Welcome!