



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON FINTECH AND MACHINE LEARNING

**Problems and probable solutions of applying recent
machine learning techniques to financial time series and data**

By

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Abstract

Recent machine learning techniques such as deep learning and reinforcement learning were built on specific assumptions of the underlying data generation process. Financial time series frequently do not satisfy these assumptions. In this talk, we discuss the possible problems if these techniques are applied blindly. The solutions to these problems are in general problem specific. However, some of the pain can be alleviated by combining recent machine learning techniques with more classical statistical and econometrics insights. We will discuss these probable solutions with examples.

Biography: *Chak Wong is currently the London head of machine learning center of excellence and the global technical lead of time series and reinforcement learning group of JP Morgan. He is Professor of Science Practice in the Mathematics Department of HKUST. He held various industry and academic positions previously in various institutions, including Head of Financial Institutions and Sovereigns Asia in Societe Generale, Head of quantitative investment in Ping An Asset Management, Head of IBD Structuring Asia in Barclays, Head of non-vanilla trading of UBS, Executive Director in Goldman Sachs and Morgan Stanley. He was Professor of Fintech in the System Engineering Department of CUHK, Professor of Finance Practice in Finance Department in the Business School of CUHK.*

Date : 9 December 2021 (Thursday)

Time : 2:00pm – 3:30pm

Venue : Room 2502 (Lifts 25/26)

All are Welcome!