



AMA Seminar Series on Young Scholars in Optimization and Data Science

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Topic

Building Up Deep Learning Theory: Perspectives of Optimisation and Loss Landscape

Date | Time

17 May 2024 (Friday) | 10:30am - 11:30am (HK Time)

Venue:

Y301

Abstract:

Deep learning has long been criticised as a "black-box" model. A major problem is why deep neural networks are over-parameterised, but can have good generalisability. In this talk, I will give a brief overview of efforts at building up deep learning theory, and my works from the perspectives of optimisation dynamics and the algebraic/geometric structures of deep neural networks' loss landscape.

Bio:

Fengxiang He is a Lecturer at the School of Informatics, University of Edinburgh. His research interest is in trustworthy AI, particularly deep learning theory and explainability, theory of decentralised learning, privacy in machine learning, symmetry in machine learning, learning theory in game-theoretical problems, and their applications in economics. He is an Area Chair of ICML, NeurIPS, UAI, AISTATS, and ACML.