Machine Learning for Combinatorial Optimization

SPEAKER **Prof Junchi Yan**

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TIME 10:00 AM - 12:00 PM

VENUE CS Seminar Room, Y6405, 6th Floor,
Yellow Zone, Yeung Kin Man Academic
Building, City University of Hong Kong,
83 Tat Chee Avenue, Kowloon Tong

ABSTRACT

In this talk, I will discuss the development of machine learning for combinatorial optimization, not only in general methodology but also particularly generative models for AI4Opt. I will show that how the idea of diffusion models could be introduced to solve the notoriously hard combinatorial problems. I also give some prospective idea on the future of the research directions.

BIOGRAPHY

Junchi Yan is a Professor and Assistant Director with School of Artificial Intelligence, Shanghai Jiao Tong University, Shanghai, China. Before that, he was a full-time Senior Research Staff Member with IBM Research and later an affiliated consultant Senior Researcher with AWS AI Lab in total for 10 years. His research interests include machine learning and AI4Science. He is the Associate Editor for IEEE TPAMI, Pattern Recognition etc. He is a Fellow of IAPR, AAIA, NAAI, IET. He received the IEEE CS AI'10 to Watch Award, IEEE CIS Early Career Award, and CVPR 2024 Best Paper Candidate Award. Six of his graduated PhDs now are faculties of top universities in China i.e. Fudan, SJTU and USTC.

All are welcome!

In case of questions, please contact Prof LU Zhichao at zhichao.lu@cityu.edu.hk, or visit the CS Departmental Seminar Web at https://www.cs.cityu.edu.hk/events/cs-seminars/recent-cs-colloquiums.