

Distinguished Seminar Series on Data Science & Artificial Intelligence

Multi-objective Ensemble Learning and Its Applications

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- 🕒 11:00 - 12:00 (HKT, UTC+8)
- 📍 Online via Zoom
- 🗣️ English
- ✍️ Please register at <https://polyu.hk/xSVHs> or scan the QR code



All are welcome!

Abstract

We will first introduce ensemble learning and explain why ensemble learning is interesting and still relevant even in the deep learning era. Then we describe different scenarios in machine learning where multiple objectives need to be considered simultaneously and how multi-objective learning can be formulated and used in such scenarios. The close link between multi-objective learning and ensemble learning will be pointed out. Three examples of multi-objective learning will be given, including multi-objective software effort estimation, multi-objective class imbalance learning and multi-objective fair machine learning. Finally, some concluding remarks will be made.

About the Speaker

Xin Yao is a Chair Professor of Computer Science at the Southern University of Science and Technology, Shenzhen, China, and a part-time professor at the University of Birmingham, UK. His major research interests include evolutionary computation, ensemble learning and search-based software engineering. He is an IEEE Fellow, a former (2014-15) president of IEEE Computational Intelligence Society and a former (2003-08) Editor-in-Chief of IEEE Transactions on Evolutionary Computation. His work won the 2001 IEEE Donald G. Fink Prize Paper Award, 2010, 2016 and 2017 IEEE Transactions on Evolutionary Computation Outstanding Paper Awards, 2010 BT Gordon Radley Award for Best Author of Innovation (Finalist), 2011 IEEE Transactions on Neural Networks Outstanding Paper Award, and many other best paper awards. He received a Royal Society Wolfson Research Merit Award in 2012, the IEEE CIS Evolutionary Computation Pioneer Award in 2013, and the 2020 IEEE Frank Rosenblatt Award.