

Distinguished Seminar Series on Data Science & Artificial Intelligence

The Three Pillars of Data Science

Prof. Xiaofang Zhou

Otto Poon Professor of Engineering and Chair Professor
Department of Computer Science and Engineering
The Hong Kong University of Science and Technology
Hong Kong



-  24 November 2021 (Wed)
-  11:00 - 12:00 (HKT, UTC+8)
-  Online via Zoom
-  English
-  Please register at <https://polyu.hk/alovV>
or scan the QR code



All are welcome!

Abstract

Data science is often defined as a field where big data and machine learning techniques are applied to solve data-intensive and knowledge-related problems in every application domain. That is, data science is at the intersection of computer science, mathematics and statistics, and application domains. In this talk, we will identify three research topics which are unique and fundamental to data science. Data quality management, big data management systems and machine learning-based data analytics are the three pillars of data science. We will use our work on spatiotemporal data management and analytics to support our argument and present a concrete picture of new research opportunities to advance the traditional database and machine learning research to the future of data science research.

About the Speaker

Prof. Xiaofang Zhou is the Otto Poon Professor of Engineering and Chair Professor of Computer Science and Engineering at the Hong Kong University of Science and Technology. From 2004 to 2020, he was a Professor of Computer Science at the University of Queensland, leading its Data and Knowledge Engineering research group and Data Science Discipline. He has been working in spatiotemporal databases, data mining and machine learning, data quality management, big data analytics, and data science. He was a Program Committee Chair of IEEE International Conference on Data Engineering (ICDE 2013), ACM International Conference on Information and Knowledge Management (CIKM 2016), and International Conference on Very Large Databases (PVLDB 2020). He was the Chair of IEEE Technical Committee on Data Engineering from 2015-2018. Professor Zhou is a Global STEM Scholar and a Fellow of IEEE.