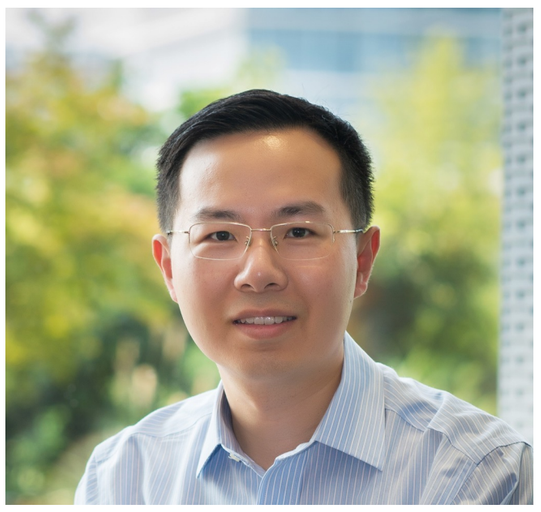
SFU Data Science Research Group presents

Seminar Series on Trustworthy Data Science and AI

SFU SIMON FRASER UNIVERSITY

Jingren Zhou

Senior Vice President, Alibaba and Ant Group



Towards an Integral System for Large-scale Graph Processing

Wednesday, Feb 23, 2022
4:00pm Pacific time

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https://data.cs.sfu.ca/ayuT

Abstract

An increasing number of business applications naturally model data as graphs to capture complex relationships and dynamic interactions among entities. Processing such big graphs typically involves a variety of graph computations over billions of vertices and edges. In this talk, I will first give an overview of the landscape of big graph processing and then present the design and implementation of GraphScope, a unified and open-source engine for big graph processing from Alibaba and Ant Group. GraphScope provides a unified programming interface to a wide range of graph computations such as graph traversal, pattern matching, iterative algorithms, and graph neural networks with a high-level programming language and supports parallel and distributed execution of sophisticated graph analysis on a cluster of machines. In addition, it provides an seamless integration of a highly optimized graph engine in a general-purpose data-parallel computing system. Finally, I will outline some challenges and future research directions for complex graph computations.

Biography

Jingren Zhou is Senior Vice President at Alibaba and Ant Group. He is responsible for driving big data infrastructure and many key data-driven businesses at Alibaba and Ant Group. He has led work to develop advanced techniques for personalized search, product recommendation, and advertisement at Alibaba's e-commerce platform and Alipay, a leading online payment and digital lifestyle platform. He also manages data analytics and intelligence research lab at Alibaba DAMO Academy. His research interests include cloud-computing, databases, and large-scale machine learning. He received his PhD in Computer Science from Columbia University. He is a Fellow of IEEE.

All are welcome.
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