### RESERRCH SEMINAR

# Technical Challenges in Blockchains



## **Dr Jing Chen**

Chief Scientist and Head of Theory Research Algorand Inc USA

**Date:** 21 August 2023 (Mon)

**Time:** 10:30 am - 11:30 am

Venue: PQ703

#### **Abstract**

In the past decade blockchain technology has attracted tremendous attention from both academia and industry. It is the technology of choice to realize decentralized ledgers that are transparent, autonomous, and tamperproof. It reduces the dependence on intermediaries and introduces a new trust structure in transaction systems, so that entities from all over the world can transact directly.

The development of blockchains has been enabled by and has in turn triggered research in many fields such as distributed computation, cryptography, and programming languages, just to name a few. In this talk I'll discuss several important technical challenges and research topics brought up by blockchains.

### **About the Speaker**

Dr Jing Chen is Chief Scientist and Head of Theory Research at Algorand. Her main research interests are distributed ledgers, smart contracts, game theory, mechanism design, and algorithms. Previously, she was a faculty member in the Computer Science Department at Stony Brook University and an affiliated faculty member in the Economics Department. Dr Chen received her bachelor's and master's degrees in computer science from Tsinghua University, and her PhD in computer science from MIT. She received the NSF CAREER Award in 2016.