



RESEARCH SEMINAR

Cryptography in Blockchain



Prof. Joseph LIU

Professor

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Date : 11 December 2023 (Mon)

Time : 3:30 pm - 4:30 pm

Venue : N002

Abstract

Cryptography is the fundamental technology for all blockchain systems. However, many people just think that blockchain cryptography only includes hash functions and basic digital signatures. In fact, there are lots of different cryptographic primitives that are playing a very important role in many advanced functionalities of blockchain. In this talk, I will introduce several cryptographic primitives and how I contribute to the advancements of different parts of blockchain system from my invented cryptographic tools.

About the Speaker

Prof. Joseph Liu is a Full Professor in the Faculty of Information Technology, Monash University in Melbourne, Australia. He got his PhD from the Chinese University of Hong Kong in 2004. His research areas include cybersecurity, blockchain and applied cryptography. He has received more than 12000 citations and his H-index is 66, with more than 200 publications in top venues such as CRYPTO, ACM CCS, IEEE S&P, NDSS, INFOCOM. He is currently the lead of the Monash Cybersecurity Discipline Group and the Director of the Monash Blockchain Technology Centre. He has been given the prestigious ICT Researcher of the Year 2018 Award by the Australian Computer Society (ACS), and has won the IEEE Technical Achievement Award in 2021 given by the Technology and Engineering Management Society for his achievement in the blockchain and cybersecurity domain.