



THE CHINESE UNIVERSITY OF HONG KONG
Institute of Network Coding
and
Department of Information Engineering
Seminar



An Introduction to Blockchain: a Cryptographic Perspective

by

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Time : 11:00am - 12:00pm

**Venue : Room 833, Ho Sin Hang Engineering Building
The Chinese University of Hong Kong**

Abstract

Regardless who Satoshi Nakamoto really is, Nakamoto's 2008 seminal paper created the cryptocurrency Bitcoin, which then incurred a ripple effect on the rapid and abundant development of Blockchain, and the more general Distributed Ledger Technology. Blockchain relies on cryptographic technologies to ensure the traceability, immutability and non-repudiation properties of a decentralized ledger. Blockchain also serves as a catalyst for promoting paper-less business and trade. This not only has the potential of significantly reducing operational costs and improving efficiency in many existing business processes and workflows, but has also facilitated disintermediation, which is making profound impacts to the entire society. In this presentation, we look into how blockchain works, and what roles that cryptographic techniques such as digital signature and cryptographic hash are playing in a Blockchain system. We will also introduce some exciting activities and projects that ASTRI is engaging on Blockchain.

Biography

Dr Duncan Wong is in charge of the Financial Technologies (FinTech) Initiative of the Hong Kong Applied Science and Technology Research Institute (ASTRI) and leading the Security and Data Sciences technology division of ASTRI through developing strategic plans, engaging industrial and governmental partners, and leading R&D activities with the mission of establishing Hong Kong as a FinTech Hub in the Asia Pacific Region.

ASTRI's FinTech initiative focuses on Cyber-Security, Blockchain or Distributed Ledger Technology (DLT), Artificial Intelligence, Big Data Analytics, and Mobile Computing including Authentication technologies. ASTRI's FinTech R&D groups are working closely with regulatory bodies such as Hong Kong Monetary Authority (HKMA), the banking industry, and other financial services sectors on building platform technologies such as Blockchain and cyber-security intelligence sharing platform, developing cyber-security training and certification programs, and nurturing FinTech talents.

**** ALL ARE WELCOME ****