

Cryptography and Blockchain for Secure and Private Web3 Ecosystem

SPEAKER Prof. Taeho Jung



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TIME 10:00 AM – 11:00 AM

VENUE Y6405, CS Seminar Room, 6/F., Yellow
Zone, Yeung Kin Man Academic
Building, City University of Hong Kong,
Kowloon Tong, Hong Kong

ABSTRACT

The world is increasingly digitized and “datafied” nowadays, where individuals generate massive amounts of data. Unfortunately, all the data is possessed by data centers and companies rather than the individuals who generate the data due to the legacy web ecosystem that is inherently centralized. Considering the personal, private, and sensitive information inside the user-generated data, there is an imminent need for techniques to secure the computation and management of the collected data from the data centers and give ownership and control back to the individuals who generate the data. Through this talk, the speaker will describe two threads of his group’s research: (1) applied research in cryptography towards secure and privacy-preserving computations for enhanced data security and individual privacy; (2) theoretical and applied blockchain research for practical and efficient decentralized systems/architectures. The talk will be concluded by describing the speaker’s vision for the future cyberspace ecosystem.

BIOGRAPHY

Prof. Taeho Jung is an assistant professor in the Department of Computer Science and Engineering at the University of Notre Dame, located in Indiana, USA, where he directs the Data Security and Privacy Lab. He is currently in the process of tenure and promotion evaluation. Before joining the department in 2017, he received a Ph.D. in Computer Science from Illinois Institute of Technology in 2017 and a B.E. in Computer Software from Tsinghua University in 2011. Prof. Jung has published over 60 articles in top conferences and journals, receiving one Best Student Paper Award, two Best Paper Awards, and two Best Paper Runner-Up awards. His research has been funded by NSF, IARPA, DHS, NASA, AFRL, NTT Research, and Facebook Research in the U.S. and IITP in South Korea, totaling \$9.3M (Jung’s shares are \$2M) in US Dollars. For more information, please visit <https://sites.nd.edu/taeho-jung/>.

All are welcome!



In case of questions, please contact Prof. Wang Cong at congwang@cityu.edu.hk, or visit the CS Departmental Seminar Web at <https://www.cs.cityu.edu.hk/events/cs-seminars/recent-cs-colloquiums>.

