ANDES Y. L. KEI

Department of Information Engineering, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong

EDUCATION

The Chinese University of Hong Kong Hong Kong
Ph.D. in Information Engineering Aug 2022 - Present

- Research Interest: Secure Multi-Party Computation and Blockchain
- Advisor: Professor Sherman S. M. Chow
- Hong Kong PhD Fellowship Scheme Awardee (2022/23)
    - 300 fellowships awarded to top and well-rounded doctoral candidates globally, across all universities

The Chinese University of Hong Kong Hong Kong
B.Eng. in Financial Technology Sep 2018 - Jul 2022

- First Class Honours (CGPA: 3.827/4.000, Major GPA: 3.941/4.000)
- Engineering Leadership, Innovation, Technology and Entrepreneurship (ELITE) Stream
- Minors: Computer Science, Information Engineering, Web and Cloud Computing

PUBLICATIONS

Conference Papers

[C2] **Andes Y. L. Kei**, Lucien K. L. Ng, Jack P. K. Ma, Sherman S. M. Chow. "Sort, Sweep, Mirror: Batch Private Interval Lookup with Logarithmic Cost." *IEEE S&P 2026*.

[C1] **Andes Y. L. Kei**, Sherman S. M. Chow. "SHAFT: Secure, Handy, Accurate, and Fast Transformer Inference." *NDSS 2025* (**Distinguished Artifact Award**).

PROFESSIONAL ACTIVITIES

External Reviewer

- 2026: AsiaCCS, Eurocrypt
- 2025: ARES, AsiaCCS, Asiacrypt, CODASPY, DSC, ESORICS, Indocrypt, NDSS, NSS, PKC, S&P, TDSC
- 2024: ARES, Asiacrypt, CANS, ICICS, ICISC, RAID, TDSC, Usenix Security
- 2023: IJIS

TEACHING

Teaching Assistant

- IEMS 5718 Web Programming and Internet Security (24-25 Term 2)
- IEMS 5725 Blockchain and Applications (24-25 Term 1)
- IEMS 5710 Cryptography, Information Security and Privacy (23-24 Term 1, 23-24 Term 2, 25-26 Term 1)
- IERG 2080 Introduction to Systems Programming (22-23 Term 2, UG)
- DSME 6788 Cyber Security (22-23 Term 1)
- ENGG 2440 Discrete Mathematics for Engineers (22-23 Term 1, UG)

WORK HISTORY

Department of Information Engineering, the Chinese University of Hong Kong   Hong Kong
Research Assistant   May 2022 - Jul 2022

- Topic: Privacy-Enhancing Techniques for Authentication
- Advisor: Professor Sze Yiu Chau
- Performed literature review on WPA2-Enterprise security and privacy-enhancing techniques for authentication
- Designed a practical, privacy-preserving authentication method for WPA2-Enterprise Wi-Fi

Faculty of Engineering, the Chinese University of Hong Kong   Hong Kong
Summer Research Intern   Jun 2021 - Aug 2021

- Topic: Fast and Scalable Payment using Cryptocurrencies
- Advisor: Professor Sherman S. M. Chow
- Performed literature review on off-chain (layer-2) scalability solutions on blockchain, including their techniques, advantages, and limitations
- Constructed a new off-chain protocol for private and scalable blockchain micropayment with practical collateral

Faculty of Engineering, the Chinese University of Hong Kong   Hong Kong
Summer Research Intern   Jun 2020 - Aug 2020

- Topic: Stochastic Optimization for Reinforcement Learning
- Advisor: Professor Hoi To Wai
- Developed a simulation environment for testing reinforcement learning algorithms
- Implemented 4 reinforcement learning algorithms and evaluated their empirical performance
- Reviewed a learning control problem from academic paper and solved it using implemented algorithms