

KEI Yat-long, Andes

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EDUCATION

The Chinese University of Hong Kong

Hong Kong

Incoming PhD Student in Information Engineering

Starting from Aug 2022

- Supervisor: Professor Sherman Chow
- Research Interest: Privacy-preserving Machine Learning and Blockchain
- Hong Kong PhD Fellowship Scheme Awardee

The Chinese University of Hong Kong

Hong Kong

Bachelor of Engineering in Financial Technology

Sep 2018 – Present

- GPA: 3.827/4.000, Major GPA: 3.941/4.000, Expected Graduation: July 2022
- Graduation Thesis Topic: Hyperparameter Optimization for Privacy-preserving Machine Learning
- Honors and Awards:
 - Dean's List 2018/19, 2019/20, 2020/21 (top students in the Faculty of Engineering)
 - Head's List (Merit) 2018/19, 2020/21 (top students in New Asia College)
- Scholarship:
 - ELITE Stream Student Scholarship 2019/20, 2020/21 (outstanding performance in ELITE course, \$16,000 × 2)
 - Mr. Wu Sai Wing Memorial Scholarship 2020/21 (10 awardees among the college, \$10,000)
 - AIG Hong Kong Scholarship 2020/21 (4 awardees among the university, \$20,000)
 - HKSAR Government Scholarship 2021/22 (top students among all university in Hong Kong, \$40,000)
- Selected Courses:
 - Fundamentals of Artificial Intelligence: an undergraduate honor course that focused on artificial intelligence
 - Applied Cryptography: a postgraduate course that discussed the latest advances in applied cryptography
 - Computer and Network Security: a postgraduate course that provided a complete overview of cybersecurity
- Relevant Coursework:
 - Built a secure e-commerce website with the use of cloud technology and security protocol
 - Conducted a research project to investigate 3 multi-signature schemes that are suitable for blockchain
 - Developed software to demonstrate design patterns and principles of Object-Oriented Programming
 - Examined 8 machine learning algorithms in solving a practical problem

WORK EXPERIENCE

Department of Information Engineering, the Chinese University of Hong Kong

Hong Kong

Full-time Research Assistant

May 2022 – Present

- Topic: Privacy-enhancing Techniques for Authentication
- Supervisor: Professor Chau Sze Yiu (Department of IE, CUHK)

Faculty of Engineering, the Chinese University of Hong Kong

Hong Kong

Summer Research Intern

Jun – Aug 2021

- Topic: Fast and Scalable Payment using Cryptocurrencies
- Supervisor: Professor Sherman Chow (Department of IE, CUHK)
- 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

- Topic: Stochastic Optimization for Reinforcement Learning
- Supervisor: Professor Wai Hoi To (Department of SEEM, CUHK)
- 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

EXTRA-CURRICULAR ACTIVITIES

- Provided regular services like book borrowing and purchasing to thousands of members of the society
- Organized various seminars and competitions

- Hosted an MP Pair Competition with 60 participants
- Applied student activity fund on behalf of the student association

COMPETITION

- Utilized machine learning techniques to create a green bond index
- Constructed a web prototype to demonstrate a user-friendly and integrated platform
- Analyzed the business model on the service provided

SKILLS

Language	Native in Cantonese, Fluent in English
Software	Proficient in Microsoft Word, Excel, PowerPoint, and Visual Studio
Programming Languages	Proficient in C, C#, Java, JavaScript, Julia, PHP and Python
Familiar Libraries	NumPy, Pandas, Scikit-learn, XGBoost, Pytorch