

EDUCATION

National Taiwan University*Master of Science in Electrical Engineering*

Taipei, Taiwan

July 2022

National Tsing Hua University*Bachelor of Science in Computer Science*

Hsinchu, Taiwan

Jun 2019

INTEREST

Security, Hardware security

RESEARCH EXPERIENCE

Research Assistant, National Taiwan University

Feb 2020 - July 2022

Dependable Distributed Systems and Networks Laboratory, Department of Electrical Engineering

- Conduct research in the field of hardware security, with a specific focus on gate-level hardware Trojans.
- Advisor: Prof. Sy-Yen Kuo, IEEE fellow

Research Assistant, National Chengchi University

Mar 2021 - Oct 2021

College of Communication

- National Science and Technology Council research program
- Designing and programming a web crawler system aimed at facilitating research in the social sciences.
- Advisor: Associate Dean Prof. J.-J. Sheu

Research Assistant, Minghsin University of Science and Technology

Aug 2020 - July 2021

Department of Finance

- National Science and Technology Council research program
- Designing and programming a decision tree-based system tailored to enhance research in the finance field.
- Advisor: Associate Prof. Ko-Tsung Chu

Research Assistant, Academia Sinica

Sep 2019 – Feb 2020

Open Source Software Foundry, Institute of Information Science

- I am responsible for software development, primarily focusing on creating BeDIS (Building/Environment Data and Information System) based on LBeacon technology.
- Advisor: Prof. Jane Liu, IEEE fellow

Summer Intern, Academia Sinica

Jul 2019 – Aug 2019

Computation Theory and Algorithms Lab, Institute of Information Science

- Engaging in research on quantum theory, algorithms, and cryptography.
- Advisor: Prof. Kai-Min Chung

Undergraduate Research

Feb 2018 – June 2019

Logos Lab, Department of Computer Science

- Project : Blockchain-based mobile pass infrastructure
- Developing a mobile e-ticket system using a technology stack that includes Hyperledger Fabric and Hyperledger Composer for blockchain, MongoDB for data storage, and building the user interface with a React Native mobile app.
- Advisor: Prof. Ren-Song Tsay

TEACHING EXPERIENCE

- Teaching Assistant** 2021 spring
Computer Programming, National Taiwan University
• Supervisor: Prof. Jiun-Lang Huang
- Teaching Assistant** 2021 fall
Machine Learning Foundation, National Taiwan University
• Supervisor: Prof. Hsuan-Tien Lin
- Teaching Assistant** 2021 fall
Discrete Mathematics, National Taiwan University
• Supervisor: Prof. Sy-Yen Kuo
- Teaching Assistant** 2018 fall
Data Structure, National Tsing Hua University
• Supervisor: Prof. Ren-Song Tsay
- Teaching Assistant** 2017 spring
Programming 1&2, National Tsing Hua University
• Github: <https://github.com/htchen/i2p-nthu>
• Supervisor: Prof. Hwann-Tzong Chen

INTERNSHIPS

- Assistant Engineers, Kingston** Sep 2017 – Mar 2018
Mechanical Design Engineering Department
• I served as the leader of a focus group comprising students from both National Tsing Hua University and National Chiao Tung University.
• I coordinated product testing activities involving a group of 200 students and furnished feedback to senior engineers based on the outcomes.
• I provided support to senior engineers by assisting in experiments, analyzing data, and maintaining the database..
- Summer Intern, Lee And Li Attorneys-at-law** Jun 2017 – Aug 2018
Patent and Technology Department
• The largest law firm in Taiwan.
• I have assisted my mentor in reviewing computer science research papers related to customer products and in drafting patent documents based on the findings.

PUBLICATION

- Wei-Ting Hsu, Pei-Yu Lo, Chi-Wei Chen, and Chin-Wei Tien, Sy-Yen Kuo, "Hardware Trojan Detection Method against Balanced Controllability Trigger Design," IEEE Embedded Systems Letters, 2023
- C.-W. Chen, P.-Y. Lo, W.-T. Hsu, C.-W. Chen, C.-W. Tien and S.-Y. Kuo, "A Hardware Trojan Insertion Framework against Gate-Level Netlist Structural Feature-based and SCOAP-based Detection," 2022 IEEE 65th International Midwest Symposium on Circuits and Systems (MWSCAS), Fukuoka, Japan, 2022
- P.-Y. Lo, C.-W. Chen, W.-T. Hsu, C.-W. Chen, C.-W. Tien and S.-Y. Kuo, "Semi-supervised Trojan Nets Classification Using Anomaly Detection Based on SCOAP Features," 2022 IEEE International Symposium on Circuits and Systems (ISCAS), Austin, TX, USA, 2022

UNDER REVIEW

- Chi-Wei Chen, Pei-Yu Lo, Chin-Wei Tien, and Sy-Yen Kuo, "A Novel Hardware Trojan Insertion Method against SCOAP-based Cluster Detection Method"