

Education

National Taiwan University(NTU)

B.S. in Electrical Engineering and Finance

Overall GPA: 4.19/4.3 Overall Ranking: 10/243(4%)

Jan. 2017

Taipei, Taiwan

Pan Wen Yuan Scholarship

Pan Wen Yuan Foundation

Sep. 2013

Awarded to 3 distinguished undergraduate students of College of EECS, NTU each year.

Dean's List

Department of Electrical Engineering, NTU

Fall 2012, Spring 2013, Spring 2015

Awarded to top 5% students of department each semester.

Research and Patents

Fast Crypto Lab, NTUEE

Fall 2015 - Spring 2016

Undergraduate Research Student

- Reproduced attack on MIFARE classic cards based on design flaws in Crypto-1 with C++.
- Used multiple methods to reduce complexity from 2^{48} to $2^{33.7}$.

Security Team, China Development Lab, IBM Taiwan

Jul. 2015 - Jan. 2016

Patent Inventor

- US Patent: Seamless Abort and Reinstatement of TLS Session(IBM Docket No. TW920160011US1)
- Co-invented method allowing passive inspectors to transparently handle existing TLS connections with resumption.

Work Experience

Security Team, China Development Lab, IBM Taiwan

Jul. 2015 - Jan. 2016

Software Intern

Taipei, Taiwan

- Developed proof of concept for intrusion protection system cloud service with node.js and iptables on self-hosted Cloud Foundry instance and multi-tenant Openstack environment.
- Demonstrated possibility and performance of packet inspection with Netfilter/NFQUEUE inside Docker containers by implementing daemons written in C.

Bonio Inc.

Jul. 2014 - Sep. 2014

Fullstack Web Developer Intern

Taipei, Taiwan

- Developed game prototype for project management training using Ruby on Rails.
- Deployed Scrum in project team as the agile software development framework.

Selected Projects

Special Topics in Computer Security

Spring 2016

- Developed advanced skills in exploiting executable binaries.
- Demonstrated possible exploit regarding CVE-2016-4024 as final project.
(Final Presentation Slides: <https://goo.gl/xOU8VH>)

Electrical Engineering Lab (Embedded Systems)

Fall 2015

- Interacted with embedded prototyping systems (e.g. Tessel) and built middleware for custom I/O devices.
- Built Naviskate, a smart skateboard prototype integrating navigation into skateboards.
(Demo Video(Chinese): <https://goo.gl/WNjM4d>)

Courspeek

Jun. 2015

- Implemented web page scraper to parse classroom reservations and obtain course data for the following semester with Javascript.
- Built web application that served ~100 students simultaneously, allowing them to search courses before officially released with node.js, React.js and mongodb.

Leadership

HackNTU

Oct. 2014 - Jul. 2015

Director of Community & Club Leader

- Organized a total of 5 workshops and meetups with a target audience of non-tech background students, introducing them to topics such as web design, hardware hacking and data science.
- Managed and coordinated 4 semester-wide courses held by the club collaborating with instructors from IT industry covering subjects such as IoT and mobile apps.

NTUEE Student Association

Sep. 2014 - Aug. 2015

Chief Information Officer

- Developed and maintained textbook purchasing system that was used by students from 4 departments and total transaction amount around 4 million TWD (~160,000 USD). The system was developed with Ruby on Rails.
- Establish and managed Linux server used by student association.