

## Education

**NATIONAL TAIWAN UNIVERSITY** *Taipei, Taiwan*

Jan. 2017

B.S. in Electrical Engineering and Finance

Overall GPA: 4.19/4.3

Major GPA: 4.19/4.3(E.E.) 4.18/4.3(Finance) Overall Ranking: 9/249(4%)

### Courses related to Computer Science:

Algorithms	Intelligent Devices and Cloud Computing(A)	Discrete Math
Operating Systems	Data Structures and Programming	Computer Architecture
Computer Security(A)	Special Topics in Computer Security	etc.

## Honors

**PAN WEN YUAN SCHOLARSHIP**

Sep. 2013

*Pan Wen Yuan Foundation*

**DEAN'S LIST** (TOP 5% STUDENTS EACH SEMESTER)

Fall 2012, Spring 2013, Spring 2015

*NTUEE*

## Coursework

### SPECIAL TOPICS IN COMPUTER SECURITY

Spring 2016

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

### ELECTRICAL ENGINEERING LAB (EMBEDDED SYSTEMS)

Fall 2015

- Interact with embedded prototyping systems(e.g. Tessel) and build middleware for custom I/O devices
- Built *Naviskate*, a smart skateboard prototype integrating navigation into skateboards.  
(Demo Video(Chinese): <https://goo.gl/WNjIM4d>)

### COMPUTER SECURITY

Fall 2015

- A cross-university course that allows us to obtain knowledge of security issues in multiple fields such as binaries, web, cryptography etc.
- Our team finished 10th place out of 68 teams in the CTF opened to public held as final term.

## Research & Patents

### UNDERGRADUATE RESEARCH

Fall 2015 - Spring 2016

*Fast Crypto Lab, NTUEE*

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

### PATENT INVENTOR

Jul. 2015 - Jan. 2016

*Security Team, China Development Lab, IBM Taiwan*

*US Patent* Seamless Abort and Reinstatement of TLS Session (IBM Docket Number TW920160011US1)

A method allowing passive inspectors to transparently handle existing TLS connections with resumption.

## Work Experience

### SOFTWARE INTERN

Jul. 2015 - Jan. 2016

*Security Team, China Development Lab, IBM Taiwan*

- Developed proof of concept for intrusion protection service gateway with node.js and iptables.
- Demonstrate possibility and performance of packet inspection with Netfilter/NFQUEUE inside Docker containers by implementing daemons written in C.
- Inventor of US patent regarding intrusion protection for connections with TLS resumption.

### FULLSTACK WEB DEVELOPER INTERN

Jul. 2014 - Sep. 2014

*Bonio Inc.*

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

## Extra-Curricular Activities

### DIRECTOR OF COMMUNITY & CLUB LEADER

Oct. 2014 - Jul. 2015

*HackNTU*

- Organized a total of 5 workshops and meetups with a target audience of non-tech background students, providing opportunities to introduce them to topics such as web design, hardware hacking, data science.
- Coordinated 4 semester-wide courses held by the club collaborating with instructors from IT industry.

### CHIEF INFORMATION OFFICER

Sep. 2014 - Aug. 2015

*NTUEE Student Association*

- Developed and maintained textbook purchasing system that was used by students from 4 departments. The system was developed with Ruby on Rails.
- Establish and managed Linux server used by student association.