# Zhanhao Chen | Resumé

### Education

Lehigh University

Pennsylvania, USA

M.S. in Computer Science, Current GPA: 4.0/4.0

Sept. 2016 - Expected Jun. 2018

Nankai University

Tianjin, China

B.E. in Software Engineering, GPA: 3.6/4.0

Sept. 2012 – Jun. 2016

• Got "Gong Neng" scholarship for three times.

# **Project Experience**

### **Deterministic Browser Project**

Pennsylvania, USA

Research Assistant, SEC Lab (Prof. Yinzhi Cao), Lehigh University

Oct. 2016-Present

- o Built an execution time deterministic browser based on Firefox to defend time channel attack.
- Implementation: Modified browser's Javascript engine and concurrency model in C++; Implied several time channel attacks for evaluation in Javascript.
- Github Link: https://github.com/nkdxczh/Deterfox

## **Indoor Navigation System**

Tianjin, China

Research Assistant, Nankai University

Oct. 2015-Jun. 2016

- Developed a Bluetooth (iBeacon) based navigation system including a map import tool, an Android App and its back-end (server and database).
- Implementation: Optimized iBeacon usage with heuristic algorithm in Matlab; Display 3D map with OpenGL.

### **Fine-grain Leaf Recognition Project**

Tianjin, China

Research Assistant, Nankai University

Jun. 2014-Mar. 2016

- Extracted and evaluated several graphic texture features for leaf recognition based on over 1000 images.
- Implementation: Applied OpenCV for graphic processing and data mining in C++; Migrated the research result (feature extraction and classification model) to an Android application with OpenCV4Android.

# Internship

### Java Development Internship

Tianjin, China

Java Developer, ChinaSoft International

Jun. 2014-Aug. 2014

- Contributed to develop a shopping website and its Android application.
- Implementation: In charge of front-end design and implementation with javascript; Contributed to database design and MVC architecture coding.

### **Publication**

- **Deterministic Browser** (under review).
  - Second author. ACM CCS 2017 (ACM Conference on Computer and Communications Security).
- Feature Evaluation in Fine-gain of Leaf.

First author. ICMMCT 2016. Hangzhou, China, DOI=doi:10.2991/icmmct-16.2016.35 (Ei Compendex)

### **Honors & Awards**

2015 National Science & Technology Competition Second Award

Tianjin, China

2015 Mathematical Contest In Modeling Meritorious Winner

Tianjin, China

2014 Excellent Team Award of the ChinaSoft internship

Tianjin, China

## **Skills**

Language: (Proficient) Java, Python; (Familiar) C++, C, javascript, HTML/CSS, Matlab

Frameworks/Tools: Tomcat, MVC, MySQL, ElasticSearch OpenCV, OpenGL, scikit-learn, Scrapy