Zhanhao Chen | Resume

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Education

Lehigh University   *Bethlehem, Pennsylvania*
M.S. in Computer Science, *Current GPA: 4.0/4.0*   *Sept. 2016 – Jun. 2018 (Expected)*

Nankai University   *Tianjin, China*
B.E. in Software Engineering, *GPA: 3.6/4.0*   *Sept. 2012 – Jun. 2016*

- Got school scholarship (15%) for three times.

Project Experience

Deterministic Browser Project   *Pennsylvania, USA*
Research Assistant, SEC Lab (Prof. Yinzhi Cao), Lehigh University   *Oct. 2016 – Present*

- Built an execution time deterministic browser based on Firefox to defend against timing channel attacks.
- Implementation: Modified browser's JavaScript engine and concurrency model in C++; Rescheduled browser's tasks and data synchronization to retain original functions; Implemented several time channel attacks for evaluation.

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 (J2EE server and MySQL database).
- Implementation: Imported geographical data from real indoor parking lot map; Designed database for map and user data to support basic navigation and position marking and sharing functions; Displayed 3D map on Android app with OpneGL.

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 the plant database from the Intelligent Computing Lab of Chinese Academy of Science.
- Implementation: Applied OpenCV for graphic processing and data mining Migrated the research result (feature extraction and classification model) to an Android application with OpenCV4Android; Developed the backend with MVC (Model-View-Controller) and MySQL to support information retrieval.

Internship

Java Development Internship   *Tianjin, China*
Java Developer, ChinaSoft International   *Jun. 2015 – Aug. 2015*

- Contributed to develop a shopping website and its Android application.
- Implementation: Being in charge of front-end (Web and Android app) design and implementation with JavaScript; Contributed to database design and Spring MVC architecture coding.

Publication

- **Deterministic Browser**
  Yinzhi Cao, **Zhanhao Chen**, Song Li and Shujiang Wu
  In the Proceedings of The ACM Conference on Computer and Communications Security (CCS), 2017 (18%)
- **Feature Evaluation in Fine-gain of Leaf**
  Zhanhao Chen, Shan Xu, Yixiong Zou, Hualong Zhang, Zhu Zhang, Yue Li, Wei Wang
  In the Proceedings of The International Conference on Machinery, Materials and Computing Technology, 2016

Honors & Awards

Mathematical Contest In Modeling Meritorious Winner   *2015, USA*
National Science & Technology Competition The Second Award   *2015, China*

Skills

Programming Language : (Proficient) Java, Python; (Familiar) C++, C, JavaScript, HTML/CSS, Matlab
Frameworks : Tomcat, Spring MVC, J2EE, MySQL, ElasticSearch, OpenCV, OpenGL, scikit-learn, Scrapy