Borui Wang

🏠 https://fredbwang.github.io ✉ boruiwang2016@u.northwestern.edu 📞 425-240-1948 in www.linkedin.com/in/wbrnwu

OBJECTIVE

Master's degree holder and seeking full-time software engineer position. Solid programming skills acquired from well-arranged courses and various projects, especially on web development.

EDUCATION

Northwestern University, Evanston, IL *Dec. 2017*
Master of Science in Electrical Engineering
GPA: 3.8/4.0

Zhejiang University, Hangzhou, China *June 2016*
Bachelor of Engineering in Control Science
Overall GPA: 3.7/4.0
Courses: *Design & Analysis of Algorithms; Big Data & Info Processing; Machine Learning, etc.*

EXPERIENCE

Aerospec Technologies, Boston, MA *Oct. 2017-Present*
Backend Software Engineer
AeroSpec Tech provides Drone data analysis and corresponding SaaS service for new energy industry.
• Designed and Maintained MySQL database for user authentication and solar site drone data management; Applied vertical sharding to tables with massive data (million level); Deployed database to AWS RDS.
• Acted as a key role in developing production website with **PHP**, **Java**, **Bootstrap**, **Node.js**, **Redis** and **MySQL** on **Apache** server; refactored native PHP website to **Laravel/Lumen** framework in a TDD manner.
• Tested web app functionality and performance with PHPUnit, Postman, JMeter and PageSpeed Insights; Maintained SSL security, log capturing & analysis, mail service, website deployment and testing.
• Developed a PHP Map to PDF conversion tool based on tcpdf which parses kml/kmz files to well-organized pdf maps, currently supporting placemarks and ground overlays (URL: *github.com/fredbwang/TCPDF-easyKMZ*);
• Participated in open-source **Javascript** project geoxml3, a web-side kml parsing library.

Northwestern University, Evanston, IL *Sept. 2016-Dec. 2017*
Teaching Assistant
• Graded EECS 317 *Data Management & Info Processing* and hosted Q&A session.

Adherence Pills, Evanston, IL *Apr. 2017-Jun. 2017*
Software Engineer
• Acquainted with the usage scenarios, hardware, frontend (**Angular JS**), and backend (**Express, MongoDB**).
• Migrated web app to Google Cloud Platform, configured database and network, tested main functions.

PROJECTS

An Internet of Things Project: Indoor Lost & Found System *Apr. 2017-Jun. 2017*
• Built an indoor lost and found system with RFID tags on item, ID reader and Raspberry pi as registration area terminal, smart phone as server, Bluetooth LE for server-client communication.
• Built a web application with Express backend framework, Jade frontend template and MongoDB database, and realized functions of item registration, locating and alarming.
• Further proposed an outdoor extension via IPv6 network on Bluetooth device and interfaces on multiple advanced algorithms or smart home scenarios.

Extension on FEC Data Web Application *Jan. 2017-Feb. 2017*
• The web app is organized in three-tier style, in which JS and HTML running on web browser as presentation tier, a **Perl** CGI script running by Apache web server as logic tier, and an Oracle database as data tier.
• Displayed FEC (Federal Election Commission) data on a map view via Google Map API, supported querying by election cycles and extended the system by Implementing user inviting and opinion collecting functions; Summarized and visualized financial activities including donations and transactions together with individual's opinions on elections.

SKILLS

Programming Languages: Familiar with PHP, Java, MATLAB;
Capable of Python, JavaScript, CSS, SQL, Assemble Language, Perl, C/C++.
Software & Platform: Apache, Laravel, Node.js, MySQL, MongoDB, Google Cloud Platform, AWS, Express