**CHEN LIU**

302-268-4260 | leoatud@gmail.com | Newark, DE 19711

**Project Experience**

**Web Application *Spring Microservices Forum with RESTful API Web App***

* Presentation and Controller layers using JSP, HTML, JavaScript
* Business logic using Spring IoC, AOP, and DAO layers, Hibernate for all modules
* Implemented all the components following test-driven development methodology using JUnit
* Deployed web app into Tomcat Server with local MySQL database system

**Desktop Application *Six Axis Robot Controlling Desktop Software***

* Developed GUI for robot control system using Java Swing and AWT
* Implemented the robotic kinematic model for robot manipulation

**Linux Architecture *Arch Linux Kernel Build and Raspberry Pi Kernel Module Build***

* Explored Linux construction on the kernel module level to write the basic kernel files for Arch Linux
* Completed general purpose input and output (GPIO) controls for seven segment displays on Raspberry Pi by writing the kernel file and cross compiling the source file.

**Working Experience**

**Research Engineer - AlphaSense Inc.**  *Oct. 2016 – Present*

* Lead robotic project and build 6 Axis Stepper Motor Robot with Control App
* Implement Forward and Inverse Kinematic Model with Matrix-Vector library for Robot App
* Upgraded UI and then published beta version LITHO PCB Printer App , successfully demoed the whole system in two conferences
* Built STL, Gerber file phasing API for generating pattern and image based on Java DIP
* Tested and refined calculation algorithm for NDE sensor to improve the precision of measurement
* Designed, layout, fabricated and tested Printed Circuit Boards according to system requirement
* Defined environmental test specification and led the testing, data acquisition (DAQ) and provided data-driven recommendations

**Software Engineer Intern - B&WTek Inc.** *Jun. 2016 – Sept. 2016*

* Designed UI for LIBS handheld device using QT platform
* Worked on Spectrometer Windows App and fixed over 20 bugs using MSVS WPF
* Documented the instrumental software reports and presented to non-technical stakeholders

**Technical Skills**

* **Programming Languages:** Java, JavaScript, Python, C++, C#, HTML, XML, CSS, SQL, Bash
* **OS/IDE/Frameworks:** Linux, OS, Windows, Eclipse, IntelliJ, Visual Studio, AWS, Git, QT
* **Dev Areas:** Web Application, Desktop Application, Embedded System

**Education**

University of Delaware, Newark, DE *Feb. 2015 – Jun. 2016*

* M.S. in Electrical and Computer Engineering (GPA: 3.8/4.0)

China University of Mining & Technology (CUMT), Xuzhou, Jiangsu *Sept. 2010 – Jun. 2014*

* B.S. in Electrical Engineering (GPA: 3.6/4.0)