Charles J. Lovering

cjlovering@wpi.edu
github.com/cjlovering - wpi.edu/~cjlovering - playground.vision
978-501-3556

OBJECTIVE: Internship involved in machine learning, front-end web development, or computer security

EDUCATION: Worcester Polytechnic Institute (WPI), Worcester, MA
Bachelor of Science in Computer Science, GPA 3.97/4.00 *Feb 2018*
Masters of Science in Computer Science, GPA 4.00/4.00 *May 2018*

WORK EXPERIENCE:

Software Engineering Intern*, Network Security***,** Silicon Labs *May – July 2016*
- Built a fuzz-testing engine to test the security of the Thread protocol stack
- Developed an internal plugin to test cache-performance of a micro-chip

Software Engineering Intern, *DevOps,* Imagitas *June – Aug 2015*
- Developed, maintained, and enhanced build and deployment scripts using python, perl and git
- Enhanced automatic testing of source code by writing selenium tests using a robot framework

Computer Science Teaching Assistant, WPI *Aug 2015 – Present*
- Led labs, held office hours, graded homework and wrote automatic tests.

RESEARCH EXPERIENCE: March 2015 – Present

Dynamic Time-Warping Algorithms, WPI *Aug 2016 – Feb 2017*
- Research cutting-edge algorithms, building an interactive platform, and writing academic paper

Research Assistant, Neuroscience Lab, WPI *June – Aug 2013*
- Collected data using PCR, analyzed data, aiming to diagnose a connection to a gene that humans share with Drosophila (fruit flies), to Alzheimer's disease

CLASS PROJECTS:

Software Engineering, WPI *Oct – Dec 2015*
- Led 9-person team, building backend for a mapping tool to find the way between locations at WPI
- Built a polished and dynamic UI a mapping tool using JavaFX

Operating Systems, WPI *Aug – Oct 2015*
- Designed and developed a shell simulator capable of background task execution
- Injected system calls into Linux kernel to monitor user activity

Local Area Networks, (grad), WPI *Jun – Jul 2016*
- Developed socket-level C chat client for multiple concurrent users
- Built interactive interface, and a secure and scalable server infrastructure

Programming Languages, WPI *Apr – May 2016*
- Built a type-inferencer
- Built an object-oriented language with classes and a language with lists and exceptions

INDEPENDENT PROJECTS: March 2015 – Present
- Designed and built a platform for visual displays, using js, HTML5 canvas, React *Jul 2016*
- Utilized JavaScript, Html, CSS, Bootstrap, jQuery and Ractive.js to create a personal website *Feb 2016*
- Built an application that solves any system of equations using the Gauss Jordan Algorithm *Apr 2015*

SKILLS**:**

Languages: Java, C, js, Python, Racket, Bash, SQL, Haskell, C++
Tools: Git, Atom, EMACS, React, Latex, Rative.js, jQuery, Virtual Box, Bamboo, Intellij , Eclipse
Other Related Coursework:
Programming Languages, Theory of Computation, Algorithms, Foundations of Computer Science, Database Systems, Systems Programming, Machine Organization and Assembly Language, Network Security*, AI*, Data Mining*, Machine Learning*, A. of Algorithms*, I. Data Science*, Data Analytics & Statistical Learning*

*Will be completed by May 2017