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WAVERLY ROEGER

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OBJECTIVE AND SKILLS

Seeking a full-time software engineering role in New York City starting Spring or Summer 2019.

LANGUAGES: C++, Python, Java, C, SQL

OPERATING SYSTEMS: Windows, Linux, MacOS

WORK EXPERIENCE

LAWRENCE LIVERMORE NATIONAL LABORATORY

Software Developer

Jul 2017—Present

- Independently designed a complex database model for the Virtual Test Library in the Weapons and Complex Integration's Document Management System (DMS) using Django with Python, redesigned and created corresponding dynamic web pages to navigate the library and query the database.
- Created an automated component to revise metadata inconsistencies using regular expressions in Java, and implemented a method to cleanly manage the database tables through the DMS user interface.
- Investigated and made improvements to a spiking neuron algorithm to solve a quadratic unconstrained binary optimization (QUBO) graph theory problem run on IBM's TrueNorth neurosynaptic hardware.
- Restructured codebase to analyze accuracy of adding a stochastic leak to QUBO and presented results; compared the accuracies of starting with different firing axon densities, utilizing Matplotlib in Python.

GARMIN INTERNATIONAL

Software Engineer Intern

May 2016—Aug 2016

- Developed full-stack software in Objective-C for the Mac application VIRB Edit supporting Garmin VIRB series action cameras, using Git in an Agile environment to collaborate.
- Added internal firmware update functionality, added option of Garmin-branded videos for export, proactively made various user interface improvements, learned Objective-C on the job.

IRA A. FULTON SCHOOLS OF ENGINEERING AT ARIZONA STATE UNIVERSITY

Computer Science Undergraduate Teaching Assistant

Jan 2016—May 2017

- Held lab hours, led review sessions, and answered in-class questions for core computer science courses.

EDUCATION

BARRETT, THE HONORS COLLEGE AT ARIZONA STATE UNIVERSITY

Bachelor of Science in Computer Science

May 2017

- **Honors:** *summa cum laude* (GPA: 3.83), New American University Scholar (National Merit finalist)

PROJECTS AND ACTIVITIES

Maze Generator: weaverlyplace.github.io/Mazes-Of-Waverly-Place

Aug 2016—Apr 2017

- Designed an artistic variation of Kruskal's Algorithm which generates a random customizable maze with one solution and implemented the playable game as a web page using HTML, CSS, and JavaScript.
- For undergraduate honors, completed a 21-page thesis report and successfully presented thesis defense.

Girls Who Code, Facilitator

Sep 2017—Feb 2019

- Led a middle school club of 30 students through a project-based curriculum each week, teaching the computer science fundamentals—variables, conditionals, loops, functions—and fostering community.

Women in Computer Science at Arizona State University, President

Aug 2013—May 2017

- Organized over 40 popular networking, professional development, and social events for members.
- Led outreach events at schools to introduce computer science and mentor girls in coding competitions.
- Improved organization of officers and members, and increased amount of and attendance at events.
- Coordinated the annual Programming Competition by securing required support and materials, creating programming challenges of varying difficulty, and directing the day-long event.