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Waverly Roeger

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github.com/WeiverlyPlace

Objective and Skills

Seeking a full-time software engineering role in New York City starting Fall or Winter 2018.

Languages: C++, Java, Python, C, SQL, Objective-C **Operating Systems**: Windows, Linux, MacOS

Work Experience

Lawrence Livermore National Laboratory

Software Developer Jul 2017—Present

- Develop and integrate scripts and tools in support of the Weapons and Complex Integration's Document Management System (DMS) production services.
- Independently designed a complex database model for the Virtual Test Library in DMS; created an automated component that revises metadata inconsistencies employing regular expressions in Java, and implemented a method to cleanly manage the tool's database tables through the DMS user interface.
- Investigate improvements to a spiking neuron algorithm to solve a quadratic unconstrained binary optimization (QUBO) graph theory problem run on IBM's TrueNorth neurosynaptic hardware.
- Analyzed accuracy of applying a new QUBO strategy and presented preliminary 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 UI 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: *weiverlyplace.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—Present

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

Women in Computer Science at Arizona State University, President Aug 2013—May 2017

- Organized numerous 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 event.