# RUSSELL MILLER

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# Looking for job as Software Engineer

### Work Experience

- '18-20 **Software Engineer** at General Atomics
  - Became team expert on Continuous Integration, Docker, Meson build system
  - Designed services and hardware adapters for the OMS messaging architecture using the UCI message interface
  - Generated code, using Handlebars, to create the implementation of the OMS messaging architecture, the CAL
  - Designed and implemented an OMS adapter for a radar
  - Implemented TCP and UDP socket connections and management using Boost Asio
- '16-18 Apartment Management Intern Family Business
  - Drew apartment layouts in AutoCAD; Learned about property management
- '15-16 Bioinformatics Intern at UCD, Veterinary Genetics Lab, Mammalian Ecology and Conservation Unit
  - Rewrote old, and created new BASH scripts/pipelines, increasing efficiency by up to 200%

### **Projects**

- '16 Graphics Engine C++
  - Built from scratch drawing pixels, with capabilities including drawing lines, polygons, 3D objects, and curves
  - Objects can be translated, scaled, and rotated; polygons can be colored and shaded in; save and load objects
- '15 Virtual Machine C++
  - Round-robin scheduled multithreading with thread priorities and mutexes
  - Virtual memory allocation and management and file operations such as open, close, read, and write

### **Skills**

## **L**anguages

- Experienced with: C++, Java, C, Bash, Linux, Unix, Python, Handlebars
- Worked with: Obj-C, SQL, GPU Programming, MatLab, Perl, R, Assembly Language
- Other: Japanese

#### **Technologies**

Docker, Meson, CI, Git, Gitlab, Design Patterns, Unit Testing, Catch2, TCP, UDP, Protobuf, Boost Asio,
ZMQ, PlantUML, AutoCAD

#### **Education**

- '12-17 University of California, Davis
  - B.S. in Computer Science

GPA: 3.5

CS major GPA: 3.8

#### Relevant Coursework

- Data Structures
- Software Engineering
- Database Systems
- Graphics

- Algorithm Design/Analysis
- Parallel Architecture
- Operating Systems
- Stat Analysis Thru Comp

# Other Experience

- '14-15 Davis Computer Science Club Officer Pragmatic Programming Committee Chair
  - Led Tutorials in GDB debugging and Git 4 workshops, total ~100 people
  - Led Competitions to create programs that solve puzzles of my creation
- '13-15 CS Club Tutor
  - Helped Club tutors with how to best help people learn; Tutored and helped lead review sessions
- '19- U.S. Government Secret Clearance
- '05-11 Boy Scout, Troop 764 Eagle Scout rank