

# RUSSELL MILLER

Davis, CA

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github.com/blaHS15

Looking for job as **Software Engineer**

## Work Experience

### '16-18 Apartment Management Intern

- Learned about family business
- Drew apartment layouts in AutoCAD to help with advertisement and organization

### '15-16 Bioinformatics Intern at UCD, Veterinary Genetics Lab, Mammalian Ecology and Conservation Unit

- Rewrote old BASH scripts/pipelines, increasing efficiency by up to 200%
- Helped complete new scripts, converting and analyzing genomic data

## 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++

- Capabilities including multithreading, memory management, and file input and output

### '15 FortNitta – Obj-C

- Game written for iOS; Worked in group of 15 people collaborating with entire class using GitHub

### '15 DarkMaze – C++

- Creates a randomly generated 2D maze; Uses breadth first search to find and guarantee an optimal solution
- Competition to write a solver in C++ using the program's movement interface functions

### '14 Minesweeper – C++

- Creates a randomly generated puzzle; Eliminates some impossible to solve puzzles
- Competition to program a solver in C++ using functions that mimic the usual mouse interface

## Education

### '12-17 University of California Davis

- B.S. in Computer Science      GPA: 3.5      CS major GPA: 3.9

### Relevant Coursework

- |                             |                         |                     |                           |
|-----------------------------|-------------------------|---------------------|---------------------------|
| • Data Structures           | • Software Engineering  | • Database Systems  | • Graphics                |
| • Algorithm Design/Analysis | • Parallel Architecture | • Operating Systems | • Stat Analysis Thru Comp |

## Skills

### Languages

- Experienced with: C++, C, Java, Git, BASH, UNIX, Assembly Language
- Briefly worked with: Obj-C, SQL, GPU Programming, MatLab, Perl, R, AutoCAD
- Other: Japanese

## 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

- Tutored and helped lead review sessions for 3 CS courses a few hrs/week in spare time
- Helped CS Club committee tutors with how to best help people learn

### '05-11 Boy Scout, Troop 764 – Eagle Scout rank