Russell Miller

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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
* Algorithm Design/Analysis
* Software Engineering
* Parallel Architecture
* Database Systems
* Operating Systems
* Graphics
* 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