RUSSELL MILLER

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Skills

Languages

- Experienced with: C++, C, Java, Git, BASH, UNIX, R
- Briefly worked with: Swift, Obj-C, Perl, SQL, MatLab
- Foreign: Japanese (somewhat)

Education

- '12- University of California Davis (expected graduation Spring 2017)
 - Computer Science and Animal Biology double major
 - GPA: 3.5 CS major GPA: 3.9
- '08-12 Loyola High School in Los Angeles

Relevant Coursework

- Data Structures
- Algorithm Design/Analysis
- Software Engineering
- Database Systems

- Operating Systems
- Bioinformatics
- Stat Analysis Thru Comp
- Genetics

- Systemic Physiology
- Intro to Evolution

Projects

- '15 DarkMaze $\overline{C++}$
 - Creates a randomly generated 2D maze
 - Competition to write a solver in C++ using the program's movement interface functions
- '14 Minesweeper C++
 - Creates a randomly generated puzzle
 - Competition to program a solver in C++ using functions that mimic the usual mouse interface
- '14 Nonogram C++
 - Created a nonogram puzzle generator, simple solver, and solution checker
 - Input & output are text files, allowing solver implementation in any language
- '11-12 DungeonAdventure Java
 - 2D grid based game w/ heroes, monsters, and equipment
 - First large object oriented program, used graphics and user interfaces, like buttons, listeners, and windows
- '12 Tetris Java
 - Implemented showing next pieces, storing pieces, score, and bomb and oil special pieces
 - Used APCS case study library, Gridworld

Work Experience

- '15- Intern at UC Davis, 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

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
 - Minesweeper create program to solve as much as possible of puzzle
 - DarkMaze create program to navigate a 2D maze
- '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 Boyscout, Troop 764 Eagle Scout rank