Josh Zimmerman

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Education

Carnegie Mellon University, School of Computer Science — May 2015
B.S. in Computer Science with University Honors
Cumulative GPA: 3.82

Notable coursework

15-410: *Operating System Design and Implementation* (A)
Wrote fully preemptive, multithreaded kernel; thread library; bootloader.

15-418: *Parallel Computer Architecture and Programming* (B)
Wrote and optimized parallel code.
Implemented lockless algorithms on the RMC memory model.

18-487: *Intro. to Computer & Network Security & Applied Crypto.* (A)
Performed binary exploitation, cryptographic attacks, and web exploitation.

Experience

Google: Software Engineering Intern — Summer 2014
- Worked on hardware key storage support for end-to-end, Google's OpenPGP Chrome extension (code.google.com/p/end-to-end/)
- Participated in a successful penetration testing exercise

Google: Site Reliability Engineering Intern — Summer 2013
- Improved reliability of a program that garbage collects old files
- Increased accessibility of a tool used to analyze monitoring files

Khan Academy: Software Engineering Intern — Summer 2012
- Simplified A/B testing for changes in certain key metrics
- Implemented part of a collaborative filtering video recommender
- Wrote a script to monitor rate of bug reports (git.io/dweXRw)

15-410: Operating System Design and Implementation: TA — Spring 2015
- Graded student work
- Held office hours and wrote exam questions

15-131 Great Practical Ideas for Computer Scientists: Instructor — Fall 2013, Fall 2014
- Led a course that teaches students topics like UNIX and debugging
- Wrote exercises and exam questions, organized TAs to create same

15-122 Principles of Imperative Computation: TA — Fall 2012, Spring 2013
- Composed handouts for every recitation that are now used by all TAs
- Taught two recitation sessions per week
- Answered student questions and graded student work

Languages

Python, C, bash, x86 asm, C++, SML, LaTeX, JavaScript, Java, MIPS asm

Tools

vim, git, Perforce, Mercurial, svn, Eclipse, Logisim

Honors

Dean's List: F11, S12, F12, S13, S14, F14
Honor Society of Phi Kappa Phi: Member and Student Vice President