

ALLEN ABOYTES

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EDUCATION

University of California, Santa Cruz
Bachelors of Science, Computer Engineering
U.S. Citizen

Expected Graduation: June 2019
Santa Cruz, CA
Overall **GPA: 3.5**

TECHNICAL STRENGTHS

Proficient Languages	C, Python, MIPS Assembly, x86 Assembly, Java, Javascript.
Operating Systems	FreeBSD, Unix/Linux, Raspbian/Debian.
Software Tools	Wireshark, IDA Pro, VMware, VirtualBox, Git, MATLAB
Comprehension	Networking, Computer Architecture, Operating Systems, Cryptography
Familiar With	C++, Android App Development (Java, XML), iOS App Development (Swift).

EXPERIENCE

Storage Systems Researcher <i>Storage Systems Research Center</i>	June 2017 - Present Santa Cruz, CA
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- Collaborating with graduate students to design and implement a steganographic file system.
- Building a Linux Kernel Module that finds all free blocks within a file system.
- File system hides encoded blocks within the free space of the host file system.

Computer Systems and Assembly Project Advisor <i>UCSC MESA Engineering Program · Baskin School of Engineering</i>	September 2016 - Winter 2017 Santa Cruz, CA
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- Advise a group of students on a weekly basis to assess their progress with assembly programming labs.
- Review class material like digital logic, number systems, and compiling/assembly process.
- Ensure students understand data structures and algorithms written in assembly language.

PROJECTS

FTP Server for Unix Systems <i>An FTP Server Following RFC 959</i>	Winter 2017 Santa Cruz, CA
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- FTP Server supports uploading single files, not entire directories
- Data is sent with TCP sockets with custom API to encode packets
- Application's Client CLI accepts commands: ls, get, put, quit

HTML5 Snake Game <i>Classic Snake Game - Web</i>	Summer 2017 Santa Cruz, CA
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- Snake game is made on HTML5 Canvas element supported by a web browser.
- Snake AI is implemented using A* pathfinding to 'eat' apples.
- Game incorporates collision detection, growing snakes, and random apple placement.

RELEVANT COURSES

Core Courses: Operating Systems, Computer Network Programming, Algorithms & Abstract Datatypes
Data Structures, C Programming, Computer Networks, Assembly Language, Electronic Circuits.
Other Courses: Linear Algebra, Differential Equations, Vector Calculus, Applied Discrete Mathematics.