Joshua Karnofsky

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University of Pennsylvania, School of Engineering and Applied Science, Philadelphia, PA
Bachelor of Science in Engineering, Computer Science, May 2017
Cumulative GPA: 3.81/4.00
Dean's List 2013-14, 2014-15, 2015-16

Technical Skills

Languages/Technologies:	Java, Objective-C, Swift, C, Python, JavaScript, MATLAB, Git/Perforce
Experience with:	iPhone/Android Development, Web Development, Agile Development
Relevant Coursework:	Data Structures, Algorithms, Machine Learning, Operating Systems, Linear Algebra, Engineering Entrepreneurship
Fields of Interest:	App Development, Entrepreneurship, Audio Software, Artificial Intelligence

Work Experience

TA / Product Manager for CIS 573, Software Engineering (Fall 2016)
Managing, advising, and evaluating student teams while teaching Agile development techniques

iOS Development Intern at MathWorks, Natick, MA (Summer 2016)
- Implemented new features for MATLAB Mobile and performed code reviews
- Improved continuous integration system, automating unit testing and app submission

Software Development Intern at EverTrue, Boston, MA (Summer 2014-2015)
- Developed web application implementation of the EverTrue mobile app using CoffeeScript and Facebook's React and Flux
- Developed desktop application to automate Apple's registration/submission process for customer-specific extensions of white-label iPhone app using Ruby, Xcode, and Amazon Web Services
- Reduced certificate generation, provisioning profile generation, and 10 other manual steps to one click, decreasing processing time from hours to minutes per customer
- Implemented new iPhone application features, including TouchID capability

Developer at Daily Pennsylvanian (2013-2014)
Created interactive websites and graphics for news reports in Penn student newspaper

Webmaster for Mike Barrett State Senate campaign (Summer 2012)
Maintained campaign website and coordinated online communication strategy with the candidate and campaign manager

Personal Projects

InferMD (Spring 2016)
Developed a medical calculator iPhone application for hospitalists and medical residents to help make high-quality, low-cost decisions at point of care

Neural Network NBA Prediction Model (Fall 2015)
Used the Python sklearn module to model/predict NBA game outcomes with expert level accuracy

Real-Time Sound Reactive LED Display (Summer 2015)
Implemented real time LED light display using Python on a Raspberry Pi. Created algorithm that responds dynamically to any musical signal. Built web server on Raspberry Pi for remote control

SpyCam (Summer 2014)
Developed iPhone application marketed for kids interested in detective play, allowing undercover photo and video capture

Flock (Fall 2014, PennApps Hackathon)
Developed web application using Node and MongoDB that matches groups attending the same events