## Joshua Karnofsky

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#### **Education**

# 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, 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 (Summers 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 customerspecific 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, Philadelphia, PA (2013-2014)

Created interactive websites and graphics for news reports in the UPenn student newspaper

## Webmaster for Mike Barrett State Senate Campaign, Lexington, MA (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 that matches groups interested in attending the same events together. Worked in a team of three, using Node and MongoDB