# Luke A. Sorenson


**Contact Information**

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**Skills**

**Programming** | C++, Python, Java, PHP, C, C#, Objective-C, Node.js, HTML5/CSS, Verilog, MATLAB
Other | Algorithms, Unix, MySQL, Android Development, Logic Design, Circuit Design, LaTeX, Django

**Education**

**Boston University** Class of 2016 | Boston, MA

*Computer Engineering, Electrical Engineering (Double Major)* **August 2012 – Present**

- GPA: **3.95**
- Dean's List (all semesters)

**Professional Experience**

**Downtyme, Inc.** | Boston, MA

*Founder and CEO*, **Android** and **iOS** mobile app Downtyme **December 2013 – Present**

- Championed product vision and team enthusiasm, coordinated development/design team
- Led programming effort for server infrastructure (**Django** rest framework) and client apps

**Google Inc.** | Mountain View, CA

*Software Engineering Intern* for **AdWords** team **May – August, 2014**

- Created an algorithm to improve quality of suggested search queries given a web page
- Worked with the MapReduce programming model to manipulate large amounts of user data for delivering better ads for every user query

**Boston University Visual Image Processing Lab** | Boston, MA

*Research Intern*, Gesture-Based Human Computer Authentication Project **June – August, 2013**

- Funded by the National Science Foundation and the University Research Opportunity Program
- Developed a **Windows** application using **C#** and XAML for recording and saving synchronized video from multiple Kinects
- Collected an extensive database of gestures, applied recognition algorithms, and analyzed the data

**Boston University Department of Electrical and Computer Engineering** | Boston, MA

*Undergraduate Teaching Fellow* for Software Engineering Course (C++) **September 2014 – Present**
*Teaching Assistant* for Engineering Computation++ Course (Python) **September – December, 2013**

- Aided students during lecture / lab and held office hours to provide extra help

**Recent Projects**

(Project videos at www.lukesorenson.info and available source code at www.github.com/lasoren)

**Mixr** (iOS app and top seven hack at LA Hacks 2014)

- iPhone app designed to mix up your social circles with your friends while sitting in a group
- Showcases a new technology my team and I developed at the hackathon using iBeacon and compass information
- To interact with the app, users simply swipe in the direction of someone else in the group

**SIM-V** (Self-Driving Indoor Mapping Vehicle using MSP430)

- An autonomous vehicle, which navigates hallways taking pictures of its surroundings

**file_reconciler** (Java, Command Line Tool)

- Reconciles arbitrary files between computers over the air with maximal efficiency and minimal bandwidth
- Algorithm is fast and efficient especially for very large files with a small number of changes (100MB file with 5 changes reconciled in 25KB of data transferred)

**Honors and Awards**

Winner of Boston University **Imagineering Competition** with entry Downtyme 2014
Grant received from the Boston University Research Opportunity Program (UROP) 2013
Winning team of Microsoft's Boston University Coding Challenge 2013

**Community Involvement**

**Lead Engineering Ambassador** for the BU College of Engineering 2014-Present
BU College of Engineering **Dean's Host** 2013-Present
Founder and Secretary of Make_BU (club) 2013-Present