# Jeremy Goldman

Personal Website: jgoldm01.github.io • Github handle: jgoldm01
72 college ave, apt 2 • Medford MA 02155 • 410-948-8119 • jeremygoldmanmd@gmail.com

#### **EDUCATION**

Tufts University (Medford, MA) 3.51 GPA – Computer Science GPA: 3.67, Economics GPA: 3.7 Bachelor of Science in Computer Science and Economics, class of 2015

#### **SKILLS**

- Languages: Python, Java, C++, Objective-C, C, Matlab, Html, XML, CSS, Javascript, LaTex, Assembly, Erlang, Scheme, ML, Ruby, Swift
- Experience with Android Studio & Cocoa development, and coding in a Linux, Windows, & Mac environment
- Advanced piano playing, detailed knowledge of music theory
- Technologies: SQL, AngularJS, MongoDB, Hadoop, jQuery

## RELEVANT PROJECTS AND COURSEWORK

- <u>SudokuSolver:</u> Connected to Tkinter GUI, this finds the solution to any solvable Sudoku puzzle. It is comprised of a 3d list with the board (2d) and possible spots (3). First knocks off impossible values, then non-deterministically tests available spaces. May be in NP, working on a P solution. Python.
- <u>Psychologist's website</u>: Designed and implemented professional website for Dr. Lisa Goldman PHD, LLC. *Drlisagoldman.github.com*
- <u>Java Games</u>: Snake and Tetris, written in Java using Eclipse. Downloadable files available on my website.
- <u>PacketAlarm:</u> programmed an alarm system that alerts to the user when it detects an attacking Xmas or Null port scan, and can also analyze a web server log for NMAP scans & Shellcode insertion. Utilized the PacketFu gem to extract fields of TCP and UDP packets. Written in Ruby.
- <u>Image Compression:</u> Compresses an image by converting RBG pixels to vcs and then encoding the values of each 4-pixel block into a 32 bit key. Can also decompress from encrypted keys. Code in C.
- Beast: name of the computer I built over the summer. Runs Ubuntu 14.04, Windows 8.1, and OSX Mavericks
- <u>Courses:</u> Machine Structure & Assembly Level Programming, Data Structures, Computation Theory, Analysis of Algorithms, Linear Algebra, Web Programming, Concurrent Programming, Functional Languages, Operating Systems, Intro to Computer Security

#### PROFESSIONAL EXPERIENCE

Mobile AppsRPN, Medford, MA, Mobile Development Engineer, February 2015-present

- Transition source code for tens of android apps to build from Android Studio, rather than Eclipse IDE
- Implement menu templates to be filled with JSON elements. This allowed the company to push new mobile applications that fit within a template at a significantly faster pace. Ex: car dealerships with similar interfaces

## MIT Lincoln Labs, Lexington, MA, Software Developer, June 2014-August 2014

- Code a GUI to write large target configuration files for the radar simulation system (RSS)
- Calculate point localization in three dimensional space and time, involving advanced trigonometry and the use of quaternion matrix operations
- Design a front-end user interface that is easy to understand and allows flexibility of targets' radar-cross-sections, interference configurations, and flight paths
- Save senior engineers 1-2 hours of work a day by automating the flight paths of test targets

### TechBreakfast, Baltimore-Washington Area, Conference Assistant, May 2013 - August 2013

- Network with technology-based entrepreneurs in the Baltimore-Washington area
- Explore the interface of Wirecast software, constantly learning how to perform new functions
- Record and stream presentations, by operating multiple webcams, audio inputs and computer screens
- Build tutorials for future streamers on how to use Wirecast

## Tufts Music Department, Medford, MA, Piano Accompanist, September 2011-present

- Sight-read or play prepared background piano during vocal lessons and performances
- Determine what pieces would be best for students as well as how they should work on such pieces