Ismael Izzy Gomez

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Education

Massachusetts Institute of Technology **Cambridge, MA**
Bachelor of Science in Computer Science and Engineering *Expected 2017*
Master of Engineering in Electrical Engineering and Computer Science *Expected 2018*

Select Coursework: Design and Analysis of Algorithms, Computer System Engineering, Network and Computer Security, Computational Structures, Machine Learning*, Operating Systems*

Experience

Amazon Lab126* **Sunnyvale, CA**
Software Engineer Intern *Summer 2016*
- Developing the use of machine learning models to optimize memory footprint of e-reader (Kindle) content.

AlphaSights **New York, NY**
Software Engineer Intern *January 2016*
- Interned during the month-long winter term between semesters. Worked alongside the software engineering team on an in-house app built on Ember.js on the frontend and Rails on the backend.

Various Research Groups at MIT Labs **Cambridge, MA**
Undergraduate Researcher in {A: CSG @ CSAIL, B: CP @ Media Lab} *Spring - Summer 2015*
- A: Tested and debugged the compiler of a Fresh Breeze multiprocessor chip, which is an architecture simulated in Java optimized for high-performance, parallel computation
- A: Designed and refactored a benchmark program implementing the Hartree-Fock method, a quantum mechanics approximation algorithm, in a functional-programming variant of Java
- B: Developed and programmed interface between an algorithmic analysis package in MATLAB to a prototype hardware system of modular, pressure-sensitive sheets run using an Arduino and ATmega8 boards
- B: Model k-means clustering algorithm to identify individual footsteps on the pressure-sensitive sheets; analyze footsteps and corresponding centroids to predict walking behavior

Pololu Corporation **Las Vegas, NV**
Electrical and Software Engineer Intern *Summer 2014*
- Designed and tested printed circuit board for *A4990 Dual Motor Driver Shield for Arduino* using Altium PCB Designer, Git, and various hardware testing tools
- Developed corresponding *Arduino software library*, simplifying use of Shield with brushed DC motors; final product solved issue of providing inexpensive motor driver capabilities to the Arduino platform

Skills

Languages: Python, Java (Android), C/C++*, Javascript (Node, jQuery, Ember), HTML/CSS

Tools: MongoDB, Heroku, LaTeX, Git, Zsh, Emacs/Atom, Unix-like OS's (OS X, Kali, Arch)

Interests: Machine Learning and AI, WebDev, Personal Analytics, Reading, Writing, Athletics

*in progress or upcoming semester