Ismael 'Izzy' Gomez

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Education

Massachusetts Institute of Technology **Cambridge, MA**

Candidate for Bachelor of Science in Computer Science and Engineering *Expected 2017*

Select Coursework: Design and Analysis of Algorithms, Computer System Engineering, Network and Computer Security, Artificial Intelligence, Software Engineering (Java, Web), Computational Structures

Experience

Amazon Lab126 **Sunnyvale, CA**

Software Engineer Intern *Summer 2016*

AlphaSights **New York, NY**

Software Engineer *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 *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 (Eclipse, Android Studio), C++*, Javascript (Node, jQuery, Ember), HTML/CSS (Liquid, EJS, Sass)

Tools: MongoDB (Mongoose), Heroku, LaTeX, Git, Bash/Zsh, OSX, Linux (Kali, Ubuntu), Windows

Interests: Artificial Intelligence, WebDev, Personal Analytics, Productivity Apps, Dance*, Soccer

*in progress