

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, L^AT_EX, Git, Bash/Zsh, OSX, Linux (Kali, Ubuntu), Windows

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

*in progress