

# 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*

- o 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*

- o 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
- o A: Designed and refactored a benchmark program implementing the Hartree-Fock method, a quantum mechanics approximation algorithm, in a functional-programming variant of Java
- o 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
- o 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*

- o Designed and tested printed circuit board for *A4990 Dual Motor Driver Shield for Arduino* using Altium PCB Designer, Git, and various hardware testing tools
- o 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), Javascript (Node, jQuery, Ember), Common Lisp\*, HTML/CSS (Liquid, EJS, Sass), Assembly\*

**Tools:** MongoDB (Mongoose), Heroku, L<sup>A</sup>T<sub>E</sub>X, Git, Bash, Linux (Kali, Ubuntu), Windows 8/10

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

\*in progress