

# 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\*, Differential Equations, Linear Algebra

## Experience

### Facebook\*

Menlo Park, CA

Software Engineer Intern

Summer 2017

### Natural Language Processing Group @ MIT CSAIL\*

Cambridge, MA

Undergraduate Researcher

September 2016 - Current

- Leading development on full-stack application using machine learning models to auto-classify medical data.

### Amazon Lab126

Sunnyvale, CA

Software Engineer Intern

Summer 2016

- Developed 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, C++, Java (Android), Javascript (Node, Ember, React), HTML/CSS

**Tools:** Zsh, Emacs/Atom, MongoDB, Docker, Meteor, AWS, Heroku, L<sup>A</sup>T<sub>E</sub>X, Git, OS X

**Interests:** Machine Learning, Virtual Reality, Design, Personal Analytics, Reading+Writing, Athletics

\*in progress, upcoming