

## Education

**Tufts University**, Medford, MA

*Bachelor of Science in Computer Science, Math (May 2015)*

GPA 3.63, Dean's List 2011, 2012, 2013

**Relevant Coursework:** Programming Languages, Computational Biology, Machine Structure & Assembly Level Programming (Comp 40), Cryptography, Real Analysis

## Experience

**Google**, New York City, NY

*Engineering Practicum Intern (May 2013 - August 2013)*

- Worked with a partner and two mentors to develop the saving filters feature for the DoubleClick for Publishers team.
- Created the client-facing interface for the feature in Java and implemented saving functionality.

**Tufts University**, Medford, MA

*Teaching Assistant (September 2012 - present)*

- Taught hands-on programming labs to introductory CS students
- Held regular office hours to provide one-on-one assistance with programming projects

**Brain State Technologies**, Bloomington, MN

*Intern, Software Division (August 2012)*

- Worked with a mentor to develop applications to assist in the retrieval, inspection, and update of XML based signal processing flow designs.
- Define XML schema to bind application configuration parameters to Java objects (using Apache XMLBeans)

*Intern/Senior Project, Software Division (May 2011)*

- Worked with a small team to develop an up-sampling filter for proprietary signal processing flow engine to align signal data from sources with varying sample rates

## Skills

**Languages:** C/C++, Java, Python, ML, some XML, HTML/CSS

**Github:** [github.com/marsella](https://github.com/marsella)

## Projects

**Type Inference:** Implemented Hindley-Milner type inference for a teaching language in ML. Wrote a constraint solver to assign types to correct terms and reject ill-typed terms.

**TapItOut:** Developed the front end of a native Android app that allows peer-to-peer money transfer using NFC technology. Built at the 2013 University Hacker Olympics in San Francisco.

**Virtual Machine:** Designed and wrote a 32-bit virtual machine in C. Implemented a set of basic operations and a macro assembler to create executable binary files. Wrote a calculator program in assembly.

## Leadership

Association of Computing Machinery, *president*, Tufts Orthodox Christian Fellowship, *co-president*, Tufts Hackathon, *apprentice*