

1 Education

Tufts University, Medford, MA

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

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

2 Experience

Google, New York City, NY

Engineering Practicum Intern (May 2013 - August 2013)

- Worked with a partner and two mentors to develop a save button with the DoubleClick for Publishers team.

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

3 Skills

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

Github: github.com/marsella

4 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.

5 Leadership

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