EDUCATION

**Tufts University**, Medford, MA

Bachelor of Science in Electrical Engineering and Bachelor of Arts in Mathematics, May, 2013

Cumulative GPA: 3.83

Honors: Eta Kappa Nu, Tau Beta Pi, Harry Poole Burden Prize, Dean's List All Semesters, National Merit Scholar

WORK EXPERIENCE

**Cogo Labs**, Cambridge, Massachusetts

*Senior Analyst* (March 2015 – Present)

*Quantitative Analyst* (June 2014 – March 2015)

* Created and maintained email infrastructure responsible for several million dollars of annual revenue
* Trained and directed a group to extend the Python emailing code base
* Performed in depth analyses across a variety of large datasets in MySQL and PostgreSQL
* Created several Flask web applications, deploying with Docker
* Created a web scraper combined with the YouTube API to create a viral video prediction tool

**The MITRE Corporation**, Bedford, Massachusetts

*Electrical Engineer* (July 2013 – May 2014)

* Created algorithms to combine multiple navigation sensors using Kalman filtering for robust navigation solutions
* Extensive experience with GPS navigation message structure and receiver architecture
* Performed experiments to test robustness of GNSS equipment under varying conditions

PAST COURSEWORK AND PROJECTS

**Courses**: Computer Science with C++, Discrete Mathematics, Detection and Estimation, Probabilistic Systems Analysis, Linear Algebra, Digital Signal Processing, Communication Systems, Real Analysis, Differential Equations

**Senior Design Project, AR Drone for Structural Health Monitoring,** 2012-2013

* Designed a prototype using the Parrot AR Drone platform to gather structural health information
* Create algorithms to allow the drone to autonomously navigate structures, find sensors, and analyze images
* Implement new hardware to interrogate passive RFID tags holding sensor information
* Won 2013 Harry Poole Burden Prize for best electrical engineering research project

RESEARCH EXPERIENCE

**Tufts Summer Scholar Program** Medford, MA, May 2012 - August 2012

* Joined interdisciplinary research team to segment and quantify collagen images
* Explored many image processing techniques to write automated algorithmic solutions
* Presented research results to both a general audience and to a board of peers

**Florida Atlantic University EE Department** Boca Raton, FL, July 2011 - August 2011

* Surveyed numerous facial recognition algorithms
* Researched the Principle Component Analysis algorithm and gained practical MATLAB experience

SKILLS

**Proficient in**: Python, SQL, MATLAB

**Experience in:** C++, Javascript, CSS, HTML

ACTIVITIES

**Tufts Varsity Baseball***.* 2009- 2013

* Named to the 2013 Capital One First Team Academic All-America Team
* Participated in the Level The Field program and led baseball clinics for inner-city students