

EDUCATION

Massachusetts Institute of Technology

Sept. 2016 – June 2020

Candidate for B.S. in Computer Science

Cambridge, MA

- Relevant coursework: Algorithms, Computational Structures, Elements of Software Construction, Machine Learning, Mathematics for CS, Linear Algebra, Optimization, Comp. Cognitive Science, CS Systems

PROFESSIONAL EXPERIENCE

MIT Professional Education

Dec. 2017 – Present

Teaching Assistant

Cambridge, MA

- Coordinate coursework for professional-focused data science and analytics course with 1,000+ students
- Monitor course forum to respond to student questions and troubleshoot technical issues in Python and R

Interference

May – August 2019

Software Engineer Intern

Cambridge, MA

- Built internal React web application for manual validation of 100K+ textual records
- Coordinated application feature requests from 6 internal users in 1-month of production testing
- Co-led integration effort with offsite team to connect and migrate 20+ backend MongoDB schemas

Uber Technologies

May – August 2018

Software Engineer Intern

San Francisco, CA

- Built distributed data pipelines on PySpark for batch processing of 300K+ driver trip records
- Integrated with machine learning model that achieved > 0.9 AUC in predicting driver behavior and pricing
- Updated Cassandra table schemas and Go microservices to fix a bug that affected 50K+ drivers in NYC

New England Patriots

January – May 2018

Data Analyst Intern

Foxborough, MA

- Worked with internal personnel to support data-driven analysis efforts

Philips Research North America

May – August 2017

Data Science Intern

Cambridge, MA

- Streamlined data from CSV/XML/DICOM image formats to common HDF5 data structure
- Wrote HDF5 data loader in Python for I/O of 20K+ lung nodule crops with preprocessing abstractions
- Authored patent-pending ML-based clinician support system in coordination with Mass General Hospital

MIT Media Lab, CityScience Group

Sept. 2016 – August 2017

Research Software Engineer

Cambridge, MA

- Assisted Master's Thesis student seeking improved data-driven city space allocation for architects
- Optimized multi-agent Java simulation of 24 hr. real-time to 45 sec. run-time
- Utilized linear regression and shallow CNN for traffic volume and solar radiation predictions

LifeYield

May 2015 – August 2016

Full Stack Software Engineer Intern

Boston, MA

- Optimized all web service calls by 40% via improved XML serialization in C# backend
- Wrote and deployed log monitor in C# to connect cloud computing environment with Splunk + SQL

PROJECTS

WildcatConnect iOS App

May 2015 – February 2019

Co-Founder and Lead Developer

Weymouth, MA

- Co-founded productivity app for Weymouth HS, winner of 2016 #1 Senior Project Award
- Integrated push notifications of key events, alerts and custom class groups for students and faculty

LEADERSHIP

Gordon-MIT Engineering Leadership Program

Sept. 2018 – Present

- Develop leadership, teamwork and communication skills in selective program for engineering undergrads
- Lead team of 6 juniors to develop their leadership skills in weekly lab-based setting

MIT Varsity Football

Sept. 2016 – Present

- Selected to 2017 and 2018 NEWMAC Academic All-Conference Teams

MIT Delta Kappa Epsilon Fraternity

Sept. 2016 – Present

- Previously served as Chapter Vice President, Webmaster and Community Service Chair

MIT Leadership Training Institute

Sept. 2016 – May 2019

- Mentored Boston-area high school students to create unique and local community initiatives