

## EDUCATION

### Massachusetts Institute of Technology

Sept. 2016 – June 2020

Candidate for B.S. in Computer Science, Minor in Business Analytics

Cambridge, MA

- 4.8 GPA (5.0 scale)
- Relevant coursework: Algorithms, Computational Structures, Elements of Software Construction, Machine Learning, Mathematics for CS, Optimization and Software Engineering Fundamentals

## PROFESSIONAL EXPERIENCE

### New England Patriots

January 2018 – Present

Data Analyst Intern

Foxborough, MA

### MIT Professional Education

December 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
- Assist students with understanding machine learning and data analytics fundamentals

### 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
- Evaluated deep 2D CNN's for multi-label lung nodule classification use case
- Authored invention disclosure for ML-based clinician support system w/ 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
- Generated train and test sets of 10K+ cities for supervised learning with JSON + Python data pipeline
- 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 – Present

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
- Built on AWS-hosted Express Node.js server with tiered user levels and 2-factor e-mail authentication
- Maintained for 3+ academic years with 8,000+ downloads from <https://wildcatconnect.com>

## LEADERSHIP

### MIT Leadership Training Institute

Sept. 2016 – Present

- Mentor Boston-area high school students each spring to create unique & local community initiatives

### MIT Varsity Football

Sept. 2016 – Present

- Selected to 2017 NEWMAC Academic All-Conference Team
- Elected to Player's Council twice by members of my class to lead team activities and offseason operations

### MIT Student Athlete Advisory Committee

Sept. 2016 – Present

- Serve as liaison between MIT athletes and faculty to execute department-wide fundraisers and events

### MIT Delta Kappa Epsilon Fraternity

Sept. 2016 – Present

- Served as house community service chair, coordinating charity basketball tournament and fundraisers

## TECHNICAL SKILLS

	Advanced	Proficient	Beginner
Languages	Python, Java, JavaScript	HTML, CSS, C#, Bash	R, Ruby, C, C++
Data/Frameworks	AWS, git, Node.js, JSON, CSV	MongoDB, XML, REST	SQL