#### 781.812.5423 | kalyons@mit.edu | kevinalyons.com

# **KEVIN LYONS**

### **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

Weymouth, MA

Co-Founder and Lead Developer

- 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

Serve as Chapter Vice President; Previously served as house community service coordinator

**TECHNICAL SKILLS** 

AdvancedProficientBeginnerLanguagesPython, Java, JavaScriptHTML, CSS, C#, BashR, Ruby, C, C++Data/FrameworksAWS, git, Node.js, JSON, CSVMongoDB, XML, RESTSQL