

# KEVIN LYONS

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## EDUCATION

### Massachusetts Institute of Technology

Sept. 2016 – June 2020

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

*Cambridge, MA*

- 4.5 GPA (5.0 scale)
- Relevant coursework: Algorithms, Computational Structures, Machine Learning, Mathematics for C.S. and Software Engineering Fundamentals

## PROFESSIONAL EXPERIENCE

### Nodal

August 2017 – Present

*Full Stack Developer*

*Cambridge, MA*

- Developing dashboard application built on React and Node.js for location data analytics startup
- Built authentication system on Express with secure tokenization on both client and server side
- Discussed pilot releases and future design plans with Boston-area clients

### 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 Engineering 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 7,000+ 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 Players' Council 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	Ruby, C, C++
Data/Frameworks	AWS, git, Node.js, JSON, CSV	MongoDB, XML, REST	SQL