

# KEVIN LYONS

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## EDUCATION

**Massachusetts Institute of Technology** | Cambridge, MA 09.2016-06.2020

- Candidate for B.S. in Computer Science and Minor in Business Analytics
- 4.5 GPA (5.0 scale)
- Relevant coursework includes Algorithms, Computational Structures, Machine Learning, Mathematics for C.S. and Software Engineering Fundamentals

**Weymouth High School** | Weymouth, MA Class Valedictorian 09.2012-06.2016

## PROFESSIONAL EXPERIENCE

**Full Stack Developer, Nodal** | Cambridge, MA 08.2017-Present

- Working to develop dashboard application built on React and Node.js for location data analytics
- Built authentication system on Express with secure tokenization on both client and server side
- Held meetings with clients to discuss pilot releases and future design plans

**Data Science Intern, Philips Research North America** | Cambridge, MA 05.2017-08.2017

- 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

**Research Software Engineer, CityScience @ MIT Media Lab** | Cambridge, MA 09.2016-08.2017

- 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

**Full Stack Software Engineer Intern, LifeYield** | Boston, MA 05.2015-08.2016

- 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

**Lead Developer, WildcatConnect iOS App** | <https://wildcatconnect.com> 05.2015-Present

- Comprehensive 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
- Connected directly to staff e-mail service with simple iOS app and web client
- Used for 3+ academic years by 7,000+ downloads

## LEADERSHIP

**Volunteer, MIT Leadership Training Institute** 09.2016-Present

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

**Linebacker/Special Teams Player, MIT Varsity Football** 09.2016-Present

- Elected to Players' Council by members of my class to lead team activities and offseason operations

**Volunteer, MIT Student Athlete Advisory Committee** 09.2016-Present

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

**Brother, Delta Kappa Epsilon Fraternity** 09.2016-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