

Michael Kaminsky

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EDUCATION

Massachusetts Institute of Technology

2016-present

Computer Science, expected June 2020 (GPA: 4.6/5.0)

SKILLS

Programming Languages Python, Wolfram Language, Java, Javascript, HTML/CSS

Frameworks and Tools Keras, Tensorflow, Caffe, MXNet, Linux, Node.js Git, Flask, Cassandra

Selected coursework Embedded Systems, Introduction to Machine Learning, Mathematics for Computer Science, Computation Structures

EXPERIENCE

Wolfram Research | Intern in Advanced Research Group Somerville, MA | Winter and Summer of 2018
Converted neural network models to be incorporated in to the Wolfram Neural Network Repository. This involved recreating existing models in Mathematica, and required the use of multiple different tools depending on the original implementation, including Tensorflow, Pytorch, Torch, and Caffe.

MIT Department of Material Sciences | Student Researcher Cambridge, MA | Winter 2016-Fall 2017
Created algorithms to analyze data collected on students' completion of Mathematica programming assignments. The goal of the project is to create personalized reports for each student, as well as the teacher of the class, detailing information such as code complexity and student activity.

- Created algorithms to analyze student completion of programming assignments
- Work being used by MIT professors in physics and computer science classes
- Presented research at the Wolfram Technology Conference 2017

Aeordyne, Inc. | Full-stack Development Intern Billerica, MA | Summer 2016
Developed entire frontend and backend for a network of low-cost air pollution monitoring stations located across the world using Node.js and Cassandra. The backend receives the data collected by the nodes, processes it, and allows the data to be accessed through a web interface and a RESTful API.

- Created backend and frontend for the ARISense low-cost pollution sensor network (arisense.io) using Node.js
 - Developed databases designed to scale with large amounts of data from hundreds of nodes
 - Developed interactive map to encourage public engagement and interest
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PAPERS AND SELECTED PROJECTS

Use of electrochemical sensors for measurement of air pollution: correcting interference response and validating measurements

Co-authored paper on developing the low-cost air-pollution measuring nodes used in the ARISense network. Now published in *Atmospheric Measuring Techniques*

Code Your Cloud

Developed *Code Your Cloud*, an in browser, collaborative code editor which is compatible with Google Drive and Microsoft OneDrive. At its peak, this project had 20,000 monthly users, and has so far had more than 300,000 unique users in total.

AWARDS AND ACTIVITIES

CyberPatriot Cybersecurity Competition Placed 1st in Massachusetts by securing a series of Linux-based virtual machines both using pre-written automated scripts and analysis of the machines.

Battlecode AI Programming Competition Placed 4th among freshman MIT teams. The competition required developing algorithms to control the characters in a bullet-hell type game, simultaneously dodging the attacks of enemy characters while attacking and producing more characters in an optimized and adaptive way.