

EDUCATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

September 2018 - June 2019

Masters in Computer Science with a Concentration in Computer Systems

GPA: 5.0/5.0

Coursework: Database Systems, Computer Networks, Advanced Algorithms, Computer Systems Security

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

September 2014 - June 2018

B.S. in Electrical Engineering and Computer Science with a Minor in Economics

GPA: 4.4/5.0

CS Coursework: Software Construction (Java), Software Studio (Javascript), Artificial Intelligence, Intro to Machine Learning, Graphic User Interface Design, Algorithms, Computation Structures (Assembly, C), Fundamentals of Programming (Python), Mathematics for Computer Science

EE Coursework: Microcomputer Project Laboratory (Assembly, C), Electromagnetic Waves and Applications, Circuits and Electronics

Economics Coursework: Health Economics, Public Economics and Policy, Microeconomics, Macroeconomics

Research: Built a job assignment service and simulator for PEV self driving car project using real taxi, hubway and subway data in the MIT Media Lab

EXPERIENCE

Apple

September 2019 - Present

Senior Software Engineer

- Backend engineer developing, testing and deploying new features for music, movies and TV at Apple Media Products in Golang, clojure, and java
- Architecting systems and infrastructure on kubernetes to serve billions of users and devices worldwide with over 100k TPS

MIT CSAIL

September 2019 - August 2019

Graduate Researcher

- Implemented and tested a linear program for optimizing traffic routing in a software-defined network
- First author of a research paper published in SIGCOMM 2019 presented in Beijing

Microsoft

June 2018- August 2018

Researcher

- Worked with researchers in Microsoft cloud operations group as co-authors on SIGCOMM 2019 paper
- Integrated real Microsoft historical WAN data into backtesting experiments and analysis for the paper

Novartis

June 2017 - August 2017

Software Engineering Intern

- Created an image recognition application that allows scientists and engineers to rapidly draw scalable models and diagrams
- Trained a machine learning model to identify shapes drawn by users and allow them to be placed into diagrams
- Developed a React/Redux based interface that allows users to draw a diagram and convert their hand drawings to scaleable SVGs

NASDAQ

May 2016 - August 2016

Global Technology Intern

- Experimented in an agile environment with Amazon's Alexa on natural language processing to augment current products
- Developed an automated PDF parser and website builder tool and presented a go-to-market strategy for the product to numerous business leaders

Up Photography

June 2014 - August 2019

Co-Founder and CEO

- Formed, marketed, and branded an LLC in order to use video and photo-editing skills to film aerial photos and videos with a drone

LEADERSHIP AND ACTIVITIES

Theta Tau Professional Engineering Fraternity

March 2016 - June 2018

President

- Managed and led 50 diverse college students in the creation of a brand new professional fraternity
- Governed all internal chapter operations and finances while acting as chapter president

MIT Varsity Swimming & Diving, Varsity Water Polo

September 2014 - June 2018

Captain

- 7x All-American at Division III National Championships, 12x NEWMAC conference champion, 4x Academic All-American (sprint free and backstroke)
- Center and center defender, won a Division III Eastern Championships and placed 5th at the CWPA Eastern Championships

SKILLS AND INTERESTS

Software Engineering

- Programming: Go, Clojure, Java, Javascript, C, Python, Lua, Julia, Node, React, Redux, Tensorflow
- Technologies: Kubernetes, Redis, Cassandra, Kafka, Prometheus, MySQL, Postgres, Docker, Docker compose, GraphQL, Kong, AWS

Other Interests

- Expert in video editing and animation with Final Cut Pro and Adobe Premier and After Effects
- Proficient in graphic design and photo editing with Adobe Photoshop, Illustrator, and Indesign
- Threw Javelin in High School. Served as an freshman Perfect and senior RA at boarding school. Love skiing, beach, and sunscreen