

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, Distributed Systems, 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), AI, Machine Learning, User Interface Design, Algorithms, Computation Structures

(Assembly, C/C++), Programming Fundamentals (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

EXPERIENCE

Cardinal Labs

December 2021 - Present

Co-founder & CTO

- Worked on the cutting edge to scale Solana blockchain via smart-contracts (on-chain / rust), dApp development and related cloud infrastructure
- Grew a team of 4 engineers to experts in the domain, deployed 15+ smart contracts, reached 5mm+ transactions, 150k+ unique users and 40k MAU
- Developed novel CI/CD for node deployments with index for query optimizations, and smart contract deployments involving multi-party sign-off

Apple

August 2018 - December 2021

Senior Software Engineer

- Architected systems and infrastructure on k8s serving billions of users and devices worldwide with 100k+ TPS across Apple Music, Podcasts, TV+
- Developed global automated API diff service and dashboard for safer deployments with automated anomaly detection, rollback and sign-off features
- Owned and managed globally distributed rate limit, authentication and API infrastructure for servicing internal, third-party, and partner integrations
- Led multiple cross-functional projects involving product, design, and engineering teams over multiple months shipping across multiple platforms
- Worked closely with SREs to address production issues, move core services from bare metal to edge DCs (k8s, spinnaker, helm), lead team infra trainings

Microsoft + MIT CSAIL

August 2018 - August 2019

Software Engineer / Researcher

- Optimized inter-data-center traffic routing to minimize bandwidth usage and congestion and maximize availability
- First author of a research paper published in SIGCOMM 2019 presented in Beijing https://people.csail.mit.edu/ghobadi/papers/teavar_sigcomm_2019.pdf
- Integrated real Microsoft historical WAN data into backtesting experiments and analysis for the paper

Novartis

June 2017 - August 2017

Software Engineer

- 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 digrams
- Developed a web-based drawing interface allowing users collaborate in real-time (webRTC) to draw diagrams and convert hand drawn shapes to SVGs

NASDAQ

May 2016 - August 2016

Software Engineer

- Developed a web development platform and potential new product for the Global Corporate Solutions business in the web hosting space
- Created a PDF parser to generate easy to read, human friendly, interactive websites from company filings that can be shared out to shareholders

LEADERSHIP AND ACTIVITIES

Theta Tau Professional Engineering Fraternity

March 2016 - June 2018 (Active board director)

President

- Managed and led 50 diverse college students in the creation of a brand new professional engineering fraternity
- Governed all internal chapter operations and finances while acting as chapter president - now serve as active director of alumni association

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: Rust, Go, Clojure (functional programming), Java, Javascript/Typescript, C/C++, Python, Lua, Julia, OCaml, Node, React, Tensorflow
- Technologies: Kubernetes, Redis, Cassandra, Kafka, Prometheus, Grafana, Sql, Postgres, Docker, GraphQL, Kong, AWS

Other Interests

- Hobbyist with music production, video/audio and photo 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 and FAA licensed as a small drone pilot
- Served as an freshman Perfect, senior RA, class president, and now alumni class representative at boarding school. Love skiing, beach, and sunscreen