Education

Massachusetts Institute of Technology - Cambridge, MA

2021 - 2025

B.S. in Electrical Engineering and Computer Science, Minor in Mathematics (GPA: 4.8/5.0)

Relevant Coursework: Data Structure and Algorithms, Circuit Analysis, Machine Learning, Computer Architecture

Projects

WHS Scheduler

- Designed, developed, and maintained iOS/Android app for 4 years and added backend for school administration access
- >10,000 downloads helping Westside High School students check their schedule and next classes that change day-to-day and meet with teachers without relying on paper
- Built with React, React Native, TypeScript, REST, Node, Express, MongoDB, Adobe XD and Illustrator

Attestfor.me

- Made bot for MIT students to automatically attest to MIT's COVID system to ensure they maintained access to campus
- Reverse-engineered MIT's COVID Android app to programmatically login through their SAML and OAuth flow
- Built with Python, Java, Flask, AWS DynamoDB and EC2, Linux services and cron jobs

Median

- Browser extension with >100 users that allows you to code in and display LaTeX equations on the blogging site Medium
- Reverse-engineered the Medium blogging website to simulate image drag-and-drop through code
- Built with JavaScript, Adobe Illustrator

Aaron's Presents App

- Led MIT Code for Good consulting team and served as main contact in weekly syncs
- Created iOS/Android app for managing volunteers and community projects for Aaron's Presents, a Boston nonprofit
- Built with React, React Native, Express, PostgreSQL

Experience

Cloud Services Engineer Intern, Palo Alto Networks - Santa Clara, CA

May 2022 - August 2022

- Created an internal access control system for the Global Customer Support team to debug customers' issues
- Used LDAP databases, Kubernetes, SAML to integrate into the current authentication/authorization flow
- Onboarded new team member to hand off project and organized biweekly syncs

Undergraduate Researcher, MIT Media Lab - Cambridge, MA

Jan 2022 - Feb 2022

- Led frontend team of the Indoor IoT project using RFID tags and SLAM techniques to map and place items in 3D
- Developed frontend app in React, D3.js, and GraphQL on AWS to interact with scanned 2D and 3D maps, items

University of Nebraska Omaha - Omaha, NE

Teaching Assistant, Department of Mathematics

Jan 2021 - May 2021

- Graded homework and exams for Number Theory and Cryptography course
- Held weekly office hours over Zoom

Student Researcher, Department of Mathematics

Summer 2020

- Solved a type of Diophantine equation used in number theory via their related elliptic curves
- Published paper as sole author, Bulletin of the Australian Mathematical Society, Vol 104 (1), 21 28
- Wrote scripts in Python and SageMath to automate calculations

Leadership and Involvement

Social Chair, MIT Festival Jazz Ensemble and Jazz Combos

Spring 2022 - Present

- Organized and played gigs at MIT events with >\$1000 in revenue
- Held sectionals teaching peers big band playing and saxophone techniques
- Planned hangouts and jam sessions for band members

Community Outreach Chair, Pi Lambda Phi

Fall 2022 - Present

HackMIT, Student Information Processing Board, Music Production Collaborative, Code for Good

Awards

MIT Emerson Jazz Fellow 2021 – Present

Winner in Jazz, National YoungArts Competition
Top 10 of >5600, Breakthrough Junior STEM Video Challenge

2021