Andrew Li

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Education

Massachusetts Institute of Technology - Cambridge, MA

2021 - 2024, MEng 2025

B.S. in Electrical Engineering and Computer Science, Minor in Mechanical Engineering (4.9/5.0) Relevant Coursework:

Data Structures & Algorithms, Computer Architecture, Computer Networks, Autonomous Machines, Machine Learning

Skills and Projects

Attestfor.me

- Bot for MIT students to sign up for automatic attests 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

WHS Scheduler

- iOS/Android app with >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
- Designed, developed, and maintained app for 4 years and added backend for school administration access
- Built with React, React Native, TypeScript, REST, Node, Express, MongoDB, Adobe XD and Illustrator

Feather

- Lead maintainer of HackMIT's and user management platform used by >1000 participants at our hackathons twice a year
- Handles user registration and check-in, applications, email sending, and integrates SSO into separate judging platform
- Managed 5 peers and scheduled sprints, distributed tasks, taught web development
- Built with Python, Flask, AWS EC2, Node, React, PostgreSQL, Docker

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 access customer data and debug their issues
- Used LDAP databases, Kubernetes, SAML to integrate into the current authentication/authorization flow
- Implemented micro-frontend architecture in React
- 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
- Developed iPad app to transform 3D room scans into 2D SVG floorplans in Objective-C++ and OpenCV

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 certain class of non-linear Diophantine equations 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

Vice President and Social Chair, MIT Festival Jazz Ensemble and Jazz Combos

- Organized and played gigs at MIT events with >\$2000 in revenue
- Held sectionals teaching peers big band playing and saxophone techniques
- Planned get-togethers and jam sessions for band members

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

Awards

MIT Emerson Jazz Fellow Winner in Jazz, National YoungArts Competition Top 10 of >5600, Breakthrough Junior STEM Video Challenge 2021 -