Michael Li

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EDUCATION

University of Maryland, College Park   **GPA: 3.93/4.00**
B.S. Computer Science | B.S. Mathematics | B.A. Cello Performance   *August 2018 – May 2022*

TECHNICAL SKILLS

- **Proficient:** Javascript, React, Java
- **Familiar:** Node.js, Redux, Angular, SQL, Python, C, OCaml, Ruby, Android Development

WORK EXPERIENCE

Amazon.com   **Sunnyvale, California**
Software Development Engineer Intern   *June 2021 – August 2021*

- Constructed a new system service that allows Amazon Android devices to directly connect and communicate with each other through various mediums (e.g. Network Service Discovery and Bluetooth), helping create a mesh of local devices.
- The system service was developed using **Android Java SDK** and features a robust routing mechanism based on Link State Routing that allows devices to dynamically update routing information whenever a device joins or leaves the mesh.

University of Maryland   **College Park, MD**
Teaching Assistant for CMSC424: Database Design   *January 2021 – May 2021*

- Held weekly office, assisting students from a class of over 150 students with database concepts such as database modeling, query processing, query optimization, and transactions.
- Assisted other TAs and professors in designing projects in **Python** and **PostgreSQL**, and grading quizzes and exams.

Teaching Assistant for CMSC216: Intro to Computer Systems   *January 2020 – May 2020*

- Held weekly office hours, assisting students from a class of over 600 students with computer system concepts such as pointers, memory allocation, and process control in **C** and basic **MIPS** Assembly.
- Assisted other TAs and professors in grading coding projects, quizzes, and exams.

Fidelity Investments   **Durham, NC**
Software Engineering Intern   *June 2020 – July 2020*

- Unified the IRA and Inherited RMD Calculator web tools, building a new API using **Dropwizard**, integrated with **PostgreSQL** and **Drools**. Also designed a new front end using **Angular** to support the combined service experience.
- Worked on designing the API contract, implementing business logic, writing **Mockito** unit tests, developing UI components, and building the **Express** layer to route RESTful API calls.

CATT Laboratory   **College Park, MD**
Student Developer Intern   *September 2019 – June 2022*

- Developed the Road Profile web tool using a **PERN** stack. The tool allows users to query performance metrics of detectors on roads, taking in direction, date, and time of day as query input, and displays relevant data from the requested detectors.
- Developed an Admin Page, using **React**, for CATT Lab developers to use to facilitate troubleshooting user requests. The page renders request information, allowing developers to download results, stop and requeue requests, and retrieve log files.

PROJECTS

Maryland Harm Reduction Database

- Web app developed using a **MERN** stack that provides the location of opioid resource centers in Maryland, allowing users to query for centers based on tags and location. Individual resource pages provide basic information about the selected center.
- Built the frontend and connected it to the **Express** layer for RESTful API calls and Google Maps API for location services.

Yelp with Google Maps

- Web app that lists nearby restaurants and plots information about them on a map. Markers can be dynamically filtered using a search bar and the restaurant list displays the Yelp Review rating for each restaurant.
- App was developed using **React**, Yelp Fusion API, and Google Maps API.

ACTIVITIES

UMD Club Table Tennis President   *February 2019 – May 2021*

- Outlined budget plan for 2019-2020 and 2020-2021 school year, allocating funds for new equipment and uniforms, travel and lodging fees, and rental costs necessary to run a local tournament.
- Handled communication with facility management, club sports advisors, sponsorships, and other club officers to ensure that the club met all necessary administrative requirements while continuing to publicize itself.