

Marie Yu

808 Catherine | Ann Arbor, MI 48104

yumarie@umich.edu | (517) 488-1671 | linkedin.com/in/marie-yu | https://github.com/yum25

Education

University of Michigan Ann Arbor, MI GPA: 3.76/4.0

April 2025

Bachelor of Science, Computer Science

Notable Coursework: Data Structures and Algorithms, Databases, Computer Security, Web Systems, Software for Accessibility

Work Experience

Senior Software Engineer (React, Astro, Typescript, SQL, AWS, wpAPI)

Sept 2022 - Present

The Michigan Daily, Ann Arbor, MI

- Developed and deployed The Statement 2024 Love Edition using React into an Amazon S3 bucket. Used Amazon SES service to write a python script to send out emails as love notes by pulling from a csv file.
- Using React and Astro with a PostgreSQL database, helped build an internal tool to deploy special landing pages
- Built The Michigan Daily news app with React Native and deployed to readers on the App Store and Google Play Store, reaching #12 ranking on News and Magazines in the Google Play Store.
- Managed and led a team of 7 software developers to continue improving the UI/UX of the app and adding new features.

Software Engineer Intern (React, React Native, Redux, AWS, Google Firebase, NoSQL)

May 2022 - Present

Avenu, Ann Arbor, MI

- Planning API integration with Ticketmaster into Firestore database by incrementally reading and inputting 10,000+ events into the database, substantially increasing the outreach and impact of the app.
- Took ownership and constructed in-app and quit state notifications using Firebase messaging, React Native push notifications, Google Cloud functions and AWS Lambda functions.
- Improved latency by reducing re-rendering by 66% and rewriting redux read functions.
- Implemented 100+ UI/UX changes and improvements for greater user experience and accessibility.

Software Engineer Intern - Backend (Python, MongoDB, Firebase, NoSQL)

Jan 2022 - April 2022

Avenu, Ann Arbor, MI

- Implemented data manipulation scripts in Python to create, read, update, and delete data in cloud NoSQL MongoDB database for mock data generator.
- Created Python scripts allowing generation of mock data for Cloud NoSQL Firestore database based on statistical parameters specified in input JSON file, providing customizability and ease-of-use for internal developers.
- Wrote design doc detailing objectives, metrics for success, technologies, alternatives, dependencies, and documentation for mock data generator project.
- Wrote 8 unit tests in PyTest, providing a measure of code quality improving maintainability of project for future developers.

Projects

Instagram Website Clone (React, Javascript, HTML, CSS, Jinja, Flask API)

- Built a clone of Instagram, using React as the client-side frontend to provide users with responsive like and comment features on posts, as well as an infinite post scroll and rendered other pages with static HTML templates using Jinja.
- Built a Flask API on the backend to support infinite scrolling, like/dislike and comment on posts.

Music Matcher (React Native, Flask API)

- Built a mobile app that allows users to match with local artists and songs in their area depending on their music tastes, which are gauged by swiping left or right on a particular song.
- Implemented a Flask API that returns 10 random popular songs from different genres from the Spotify API, as well as takes in a list of liked songs to recommend from a list of local artists.

Leadership Experience

Joy of Coding Coach (Python) University of Michigan, Ann Arbor, MI (Virtual)

June 2022 - Aug. 2022

- Part of a team of 16 coaches tutor a group of 1630+ students through online coding exercises in Python
- Taking 1 hour long shifts to aide students via email and video call, successfully guiding 10+ students through exercises

Coding Tutor/Community Coordinator Detroit, MI

Oct. 2021 - Present

- Extensively prepared curriculum for new teachers, and facilitated communication with Detroit Community Schools team
- Provided weekly lessons and activities to 30+ K-12 students in Detroit to supplement their school learning experience and foster a passion for coding within underrepresented communities in computer science in Scratch, MakeCode, and Python.

Skills

Languages: C/C++, Java, Python, iPython, Jupyter, Javascript, React, React Native, CSS

Technologies: MacOS, iOS, Git, XCode, VSCode, MongoDB, Firebase, NoSQL, SQL, PyTest, Redux, Google Cloud, AWS