Michael Zhong

mvzhong@gmail.com | (248) 387-9688 | github.com/MacNGz | linkedin.com/in/mlzhong

Skills

- **Languages & Libraries:** JavaScript, TypeScript, React, C++, C, C#, Python, SASS, CSS
- **Tools & Systems:** SVN, Git, Jasmine, Jest, Linux, Yarn, Webpack, Flask, Node.js, Jenkins

Experience

DocuSign - Signing Team *October 2021 – Present*

Software Engineer

- Transformed core signature functionality from a legacy solution to a **responsive** and **accessible** UX using **Typescript** and **React**, bringing a feature with 2 million uses/day into an efficient, redesigned experience.
- Spearheaded **performance** improvements, including deprecating support for legacy code and browsers, and deploying our application to **CDN**, improving code bundle load time by 50%.
- Championed code health through **Jest** unit testing and **Node** package management, resulting in a doubling of our **unit test** coverage and removing dozens of security vulnerabilities from our application.
- Owned our product end-to-end: full-stack code and automated test ownership, communicating with users, acting as SME for **cross-team** collaborations, and managing regular feature/experiment deployments.
- Led **data-driven** efforts to improve product performance through **investigating** telemetry, revealing the causes of high resource usage and documenting the process for future engineers.

Epic Systems *July 2019 – October 2021*

Software Developer - Inpatient EMR

- Designed and built out our document Macros enhancement, using **React** and **TypeScript** to create a user-centered workflow automation tool, saving nurses hundreds of hours of documentation time.
- Led scoping and implementation discussions with multiple customers worldwide, solidifying **design requirements** and championing successful **adoption** of new features.
- Owned **unit** and **performance testing** for our web applications, ensuring code quality and improving baseline response time metrics by as much as 20%.

CroMa Lab *May 2018 – April 2019*

Research Platform Engineer Lead – CroMa ALE

- Led a team of 3 in a university research lab to build a Reinforcement Learning reward crowdsourcing tool, using technologies including **OpenAI Gym**, **JavaScript**, **Python**, and **SQLite**, and deploying our platform to **AWS**, contributing as a co-author for a research paper on human-in-the-loop reinforcement learning.

Projects

Multi-Threaded Remote File Server *November 2018 – December 2018*

- Designed a remote **Linux** file server in **C++** capable of servicing multiple clients concurrently, and managing ownership permissions within a hierarchical structure.
- Optimized performance with thread pools and managing read/write locks at different file levels.

UMIGV – Autonomous Ground Vehicle *September 2017 – June 2018*

- Built a self-driving robot vehicle capable of carrying a payload to waypoints fully autonomously.
- Implemented communication stack between GPS waypoints and robot positioning for autonomous control using **C++** Robotic Operating System (**ROS**) library and tested simulations with **Gazebo**.

LEDsense (MHACKS 9): https://devpost.com/software/ledsense *March 2017*

- Built an **Arduino** project that used **MATLAB** to analyze audio files and automated the generation of **C++** sketches that provided instructions for a processor to create complex rhythm-based light effects with LEDs, solving a challenge that was previously slow and tedious.

Education

University of Michigan - Ann Arbor

B.S. Computer Science, Class of 2019

- GPA: 3.67/4.00
- University Honors (2015-2019)
- Member, IEEE-Eta Kappa Nu (HKN-BE) Honor Society