# ADITYA SONI

#### **EDUCATION**

#### University of Michigan, Ann Arbor

BSE Computer Science May 2021(Expected)

GPA: 3.9

Relevant Coursework: Data Structures and Algorithms, Introduction to Computer Organization, Foundations of Computer Science, Web Systems, Proof Based Linear Algebra, Operating Systems (in progress), Design and Analysis of Algorithms (in progress)

## **SKILLS**

PROGRAMMING: C++, Python, JavaScript, C

WEB: Node.js, Express.js, React, Flask, MongoDB, Redux, HTML+CSS, JQuery, Selenium

TOOLS: Visual Studio, Git, XCode, Arduino IDE, Jenkins

#### **EXPERIENCE**

#### Ford Motor Company, Software Engineering Intern

May 2019 - Aug. 2019

- Developed a dashboard for the DevOps team using the MERN stack (MongoDB, Express.js, React and Node.js) to consolidate the monitoring and servicing of over 34,000 servers
- · Integrated the dashboard with 4 internal tools to proactively identify server issues and significantly reduce downtime
- · Designed and built a new feature for the Ford Pass application to encourage eco-friendly driving habits

#### Seven3Rockers, Software Engineering Intern

May 2018 - July 2018

- Implemented an authentication service using Node.js and Redis to secure the server from unauthorized requests
- · Migrated large parts of the backend from PHP to Node.js by researching and implementing npm modules

### EECS Department, University of Michigan, Instructional Aide for Discrete Math

Jan. 2019 - Current

- Led a discussion section of 30 students on topics including algorithms, graph theory and proof methods
- Developed study materials, held weekly office hours and monitored the online question forum, Piazza

## MPowered Entrepreneurship, Vice President, Talent Development

Mar. 2019 - Current

- Organized a series of 5 entrepreneurship workshops in collaboration with Center for Entrepreneurship and Michigan startups
- Increased member attendance and participation by 20% in the club by organizing professional development events, planning weekly meetings and leading recruitment

# **PROJECTS**

# Live Cricket Updates

May 2019 - July 2019

Node.js, TypeScript, Socket.io, Selenium

- Built a Visual Studio Code extension that pushes live cricket updates to users, using socket.io for bi-directional client-server communication
- Executed a Selenium script to monitor a sports news website for updates in order to guarantee live scores

# Laptop Lock

June 2019 - Aug. 2019

Python, OpenCV

- Built a desktop application that turns off a user's laptop when they fall asleep or leave to save energy and protect privacy
- Implemented a Haar Feature-based Cascade Classifier to detect and track the users eyes

### **YouTube to Spotify**

May 2018 - Aug. 2018

JavaScript, HTML, CSS

- Developed a chrome extension that instantly adds songs being listened to on YouTube to a Spotify playlist
- The extension has averaged 50 impressions a day since August 2018

# **Map Reduce Server**

Mar. 2019 - Apr. 2019

Python

- Implemented a multi-process, multi-threaded server that will execute any user-submitted MapReduce jobs
- · Reinforced fault tolerance by monitoring worker heartbeats and redistributing jobs in the event of worker death