Zulaikha Zakiullah

2B Electrical Engineering

zulaikha.me | zzakiull@uwaterloo.ca | (519) 981-6051 | /zulaikha-zakiullah | /zzakiullah

Skills

Languages: Python, Java, C/C++, JavaScript, TypeScript, C#, Ruby, ARM Assembly, VHDL
Frontend: HTML, CSS, React, Vue, Angular, jQuery, Bootstrap, Tailwind CSS, Liquid
Backend: Node.js, Express.js, .NET, NGINX, SQL, GraphQL
Tools: Git, Android Studio, Jenkins, Vagrant, Qt, JUnit, Proteus, Quartus, PSIM

Experience

Software Developer | Ford Motor Company **Jan 2021 – Apr 2021**

- Developed an API to determine enabling of controls on infotainment system based on vehicle's geographic location
- Integrated runtime resource overlay packages in Android OS for vehicle's infotainment system to load specific app restrictions depending on its location, to ensure all vehicles adhere to driving standards set per country
- Enhanced team's unit test suite using Java, JUnit, and Robolectric to increase code coverage by over 20%

Test Automation Developer | Ford Motor Company **May 2020 – Aug 2020**

- Designed an automated job to run monthly using Python and Jenkins DSL to delete all unused workspaces in Jenkins machines, speeding up the testing pipeline
- Developed a command line tool with Python and Click to save developers' time by remotely controlling services on any Jenkins machine through SSH as opposed to using RDP
- Created an API implementing the façade design pattern to abstract away unnecessary implementation details, allowing for easier and faster usage

Firmware Developer | Waterloo Formula Electric **Sep 2019 – Present**

- Improved state machine design of power distribution unit to run motor and motor control cooling loops separately, allowing for more efficient use of vehicle's cooling system
- Created the firmware team's development environment running on Ubuntu using Vagrant and Ruby
- Developed CAN message simulator using Python and CAN tools through parsing of DBC and JSON files, allowing for easy remote testing of tools such as car's dashboard and telemetry

Projects

Personal Website | zulaikha.me **May 2021**

- Developed personal website with custom UI components and light/dark mode using React and Tailwind CSS
- Created a dynamic user experience by storing the user's popup responses and changing subsequent popup messages depending on previous selections

UWOSP Website | uwosp.com **Apr 2021**

- Revamped website for the UW Orphan Sponsorship Program and created custom widgets and components using Shopify Liquid, HTML, CSS, and JavaScript

Arduino Car | zzakiullah/simple-car **Apr 2021**

- Designed and built a simple three-wheeled car using an Arduino Uno and two L298N drivers to run the rear wheels

Education

University of Waterloo (Expected) **2019 – 2024**

Candidate for BASc in Electrical Engineering | **cGPA: 90.3%**

- Relevant Courses: Data Structures and Algorithms (C++), Digital Computers (ARM Assembly)