Zulaikha Zakiullah

2B Electrical Engineering

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Skills

Languages: Python, C/C++, C#, Java, JavaScript, Lua, Ruby, Assembly, VHDL
Frontend: HTML5, CSS3, jQuery, Bootstrap, Sass, Liquid
Backend: Node.js, .NET, NGINX, SocketCAN
Tools: Git, Android Studio, Jenkins, Vagrant, Docker, Qt, JUnit, Robolectric

Experience

Product Development Intern | Ford Motor Company — Jan 2021 - Present

- Integrated runtime resource overlay packages in vehicle to load specific settings depending on user's region
- Worked on distraction management team to ensure that when driver is driving, system apps are either disabled or "distraction optimized" to allow driver to use
- Worked with passenger service API in Java to allow passenger beside driver access to apps whilst driver is driving
- Enhanced unit test suite in passenger service API using Java, JUnit, and Robolectric to increase code coverage by over 20%
- Created activity in distraction management utility app using Android and Java to demonstrate integration of passenger service API in apps to other teams

Test Automation Intern | Ford Motor Company — May 2020 - Aug 2020

- Created 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
- Implemented the façade design pattern to improve readability and mask more complex components of existing software libraries behind a simpler API, allowing for easier and faster usage

Firmware Developer | Waterloo Formula Electric — Sep 2019 - Present

- Created firmware team development environment running on Ubuntu using Vagrant and Ruby
- Developed program to allow simulation of CAN messages on BeagleBone board using Python and CAN tools through parsing of DBC and JSON files
- Set up Jenkins server to run continuous integration builds to test team code on Bitbucket server
- Designed car dashboard using Python and PySide2 to display current stats and warn driver of any errors occurring in the car by receiving CAN messages to self-update every 100 milliseconds
- Reduced clock cycles taken to perform CRC calculations by over 80% by implementing STM32 HAL library written in C to replace the software lookup table method, and tested on STM32 microcontroller

Projects

UWOSP Site | uwosp.com — Nov 2020

- Designed website for the UW Orphan Sponsorship Program using Shopify Liquid, HTML, CSS, and JavaScript

EZ-E | zzakiullah/EZ-E — Aug 2020

- Created a custom Discord bot using Node.js and the Discord.js module to help stay organized in school

Education

University of Waterloo — (Expected) 2019 - 2024

Candidate for BASc in Electrical Engineering | **Cumulative Average: 90.3%**