Zulaikha Zakiullah

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Skills

Languages | Python, C/C++, C#, Java, JavaScript
Frontend | HTML, CSS, jQuery, Bootstrap
Backend | Node.js, .NET
Modules | Pygame, PyQt, Tkinter, Swing, SDL
Microcontrollers | STM32F-, Arduino
Source Control | Jenkins, Git, GitHub
Systems | Windows, Linux/Unix
Suites | JetBrains, Atlassian

Experience

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

- Created an automated job using Python and Jenkins DSL to clean unused workspaces in Jenkins machines every month
- Developed a command line tool with Python and Click to remotely control 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

Firmware Developer | Waterloo Formula Electric — Sep 2019 - Present

- Currently designing car dashboard using Python and PyQt to display stats by receiving CAN messages
- Increased car's efficiency of performing CRC calculations by implementing STM32 HAL library written in C, instead of using software lookup tables; tested on STM32 microcontroller
- Interfaced Python with PyQt, python-can library to develop GUI for car's charger controller unit (CCU) that takes in commands by user and displays charger status

Projects

EZ-E | JavaScript / Node.js | zzakiullah/EZ-E — Aug 2020

- Created a Discord bot using JavaScript and the Discord.js module to help stay organized in school
- Allows users to have the bot send messages to people at a specific date and time, which can be used to set reminders when there are upcoming due dates or assessments
- Uses file I/O to read from a JSON file to retrieve course information, such as links to meetings

Chaos the Cat | C++ / SDL | zzakiullah/Chaos-the-Cat — Jun 2020 - Present

- Currently designing a 2D multi-level side-scroller in C++ that allows the user to explore a world, collect/buy items, and fight bosses
- Implementing the SDL library to allow low level access to audio, user input, and graphics hardware
- Using object-oriented programming techniques such as classes and inheritance to structure game components

Education

University of Waterloo — Sep 2019 - Present
Candidate for BASc in Electrical Engineering | **cGPA 3.91**

- Relevant courses: ECE 150: 95%, ECE 222, ECE 250