

# Zulaikha Zakiullah

---

zzakiull@uwaterloo.ca | (519) 981-6051 | zzakiullah.github.io | github.com/zzakiullah

## 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
- Communicated with development team to disable and troubleshoot failing pre-submit test cases, and later check and re-enable when fixed

### 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