

Areeb Khan

✉ areebsafirkhan10@gmail.com

☎ 437-993-1813

in Areeb Khan

as4khan

as4khan.portfolio

Skills

C++

Python

HTML

CSS

JavaScript

VHDL

Intel Quartus Prime

Altium Designer

Jira/Confluence

Microsoft Office

VS Code

GitHub

TinkerCAD

Projects

Wildfire Detection System, STM32, Arduino IDE, C++, Tinker CAD

- Developed and designed a wildfire detection system utilizing an STM32, soil moisture, temperature, and flame sensors, and an LCD display to provide real-time alerts to clients in the event of a wildfire.
- Programmed the system using Arduino IDE and integrated each sensor to collect data and output results on the LCD display.
- Managed project tasks and deadlines for the system, utilizing Jira and Confluence to streamline collaboration and ensure timely completion of programming, assembly, and documentation tasks.

Robotic Arm, Arduino Uno, Arduino IDE, C++

- Developed and designed a robotic arm system that utilized servo motors, Arduino Uno, and potentiometers to enable coordinated movement and manipulation of objects.
- Conducted testing and calibration to ensure reliable performance.
- Developed and programmed the robotic arm system using Arduino IDE to provide real-time communication between each potentiometer and its designated servo motor.

Discord Bot, Python

- Developed and programmed a custom Discord bot using Python and the Discord.py library to perform various tasks, including welcoming new members to the server and automating administrative functions.
- Designed to play, pause, resume, and skip music on the voice channel for clients and their server members to enjoy music with ease.
- Developed and integrated a custom email-like communication feature to enable seamless communication between moderators and members via a dedicated text channel and direct messaging.

Professional Experience

Junior Service Technician, Radiation Solutions

01/2022 – 04/2022 | Mississauga, ON

- Acquired proficiency in soldering and wiring by expertly attaching and replacing components (connectors, wires, and DC Converters) onto circuit boards within Radiation Solution's products, resulting in fewer defects and improved product quality.
- Analyzed and resolved complex customer issues related to Radiation Solution's products and software, utilizing a variety of diagnostic tools and techniques resulting in increased customer satisfaction.
- Troubleshooted and repaired company's large scale detection devices in ports, landfills, and other worksites that are inside and outside of Ontario.

Education

Bachelor of Applied Science in Electrical Engineering,
University of Waterloo

09/2022 – 06/2027