Adiyan A. Ahmed

ahmea45@mcmaster.ca ● (289)-716-4323 ● github.com/adiyanahmed/ ● https://www.linkedin.com/in/adiyan-ahmed/

TECHNICAL SKILLS

Languages:
SystemVerilog, Java, Python, C, C++, ARM Assembly, MATLAB, HTML, CSS, JavaScript

Hardware:
Arduino, Raspberry Pi, ARM Microcontroller, Serial Communication Protocols (I2C, UART)

Software:
Intel Quartus, ModelSim, LTSpice, AutoCAD, Adobe Suite, MS Office Suite

Other Technologies:
Selenium WebDriver, Open3D, JIRA, Confluence, Git, GitHub/GitLab

EDUCATION

McMaster University **September 2020 – Present**
Bachelor of Engineering (B.Eng), Computer Engineering *Hamilton, ON*

- Enrolled in Level 3 of the 4-year Computer Engineering Co-op program.
- Achieved a 10.7/12.0 cGPA (3.78/4.0 cGPA).
- Deans' Honour List all semesters.
- Awarded 2020 McMaster Entrance Scholarship for outstanding academic achievements in high school.
- McMaster Engineering Society (MES) Mentor 2021-2022.

WORK EXPERIENCE

Public Safety Canada **May 2022 – August 2022**
Software Development Engineer in Test (Co-op) *Ottawa, ON*

- Engaged in the development, programming, debugging, and implementation of the test automation framework for an internal application using Java with the Selenium WebDriver Framework.
- Implemented and edited methods in Java to establish and improve the performance of the automation framework, allowing the Quality Assurance (QA) team to automate test cases using Cucumber with minimal effort.
- Participated in the Software Development Life Cycle (SDLC) in an Agile environment.
- Collaborated closely with clients and business teams to ensure that the quality and functionality of the application fulfilled all requirements after each sprint, and helped push application into production.
- Assisted QA team by writing, automating, and executing complex test cases, and creating bug reports for application defects.
- Gained experience using development tools/platforms such as JIRA, Confluence, and Git/GitLab for version control.

RELEVANT COURSEWORK

COMPENG 3DQ5 – Digital Systems Design **(Ongoing)**
- Learning to analyze and model complex digital circuits using SystemVerilog
- Understanding advanced methods of simulation, synthesis, and verification for digital systems.
- Conducting lab work on an FPGA.

COMPENG 2DI3 – Logic Design
- Manipulating and simplifying boolean expressions.
- Introduction to logic gates and logic circuits.
- Analyzing, synthesizing, designing combinational and sequential logic circuits.

ELECENG 2EI4 – Electronic Devices and Circuits I
- Studying electrical characteristics and modes of operation of semiconductor devices (MOSFETs, BJTs)
- Conducting DC and Small Signal Analysis of semiconductor circuits
- Gained experience designing and verfiying application circuits using electrical tools such as oscilloscopes

PROJECTS

Spatial Mapping System – April 2022
- Developed a system using an ARM Microcontroller and a Time-of-Flight Sensor to let users create a 3D visualization of a room using Open3D with Python.
- Performed Digital Signal Processing for a ToF Sensor
- Used Serial Communication Protocols (I2C, UART).
- Programming using ARM Assembly, C, and Python.

Graphing Calculator Application – August 2020
- Developed a graphing calculator application using Java which allows users to input and graph polynomials up to the sixth degree.
- Implemented GUI to improve user experience and allow users to clear their inputs and the graph output.

Personal Website Portfolio – September 2022
- Developing a dynamic personal portfolio website using HTML, CSS, and JavaScript.
- Website used to consolidate personal experiences, and showcase personal projects.