Adiyan A. Ahmed

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TECHNICAL SKILLS

- Languages: Java, Python, C, C++, ARM Assembly, MATLAB, VHDL, JavaScript, HTML, CSS
- Hardware: Arduino, Raspberry Pi, ARM Microcontroller, Serial Communication Protocols (SPI, I2C, UART)
- Software: Quartus, LTSpice, Visual Studio IDE, NetBeans IDE, Intelli] IDE, AutoCAD, Adobe Suite, MS Office Suite
- Other Technologies: Selenium WebDriver, Open3D, JIRA, Confluence, Git/GitHub/GitLab

EDUCATION

McMaster University Sept. 2020 - Present

Bachelor of Engineering (B.Eng), Computer Engineering (Co-op)

- 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 acdemic achievements in high school
- McMaster Engineering Society (MES) Mentor 2021-2022

WORK EXPERIENCE

Public Safety Canada May 2022 - Present Ottawa, ON

Software Development Engineer in Test (Co-op)

- Working on 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 and functions in Java to establish and improve the performance of the automation framework, allowing QA 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 met all requirements and standards after each sprint, and helped push application into production
- Assisted QA by writing, automating, and executing complex test cases, and creating bug reports for defects found in the application
- Gained experience using development tools/platforms such as JIRA, Confluence, and Git/GitLab for version control

RELEVANT COURSEWORK

COMPENG 2DX3 – Microprocessor Systems Project – Grade: A

- Developed a complete Spatial Mapping System using an ARM-Cortex M4F Microcontroller and a VL53L1X Time of Flight Sensor which allows a user to create a 3D visualization of a room on their computer using Open3D
- Implemented the Digital Signal Processing for a ToF Sensor, which includes Sampling, Analog-to-Digital, and Digital-to-Analog
- Worked with multiple Serial Communication Protocols such as SPI, I2C, and UART to implement all the components together
- Programming using ARM Assembly, C, and Python

COMPENG 2SI3 – Data Structure, Algorithms, and Discrete Mathematics – Grade: A-

- Learning and implementing data structures such as lists, stacks, queues, binary search trees, and hash tables
- Estimating and enhancing the performance of algorithms based on asymptotic time and space complexity analysis
- Programming in C++

EXTRA-CURRICULARS

Newmarket High School Robotics Design Team

Sept. 2018 - June 2020

Design Team Member

Newmarket, ON

Hamilton, ON

- FRC Team 7614
- Assisted with the design, assembly, and troubleshooting of a robot to participate in the FIRST Robotics Competition

PROJECTS

github.com/adiyanahmed/