Mohammad T Hafeez

Computer Engineering Student & Software Engineering Intern & Teaching Assistant

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I have proved my time management, leadership and drive by balancing Teaching Assistance and internships, while maintaining a 3.75 GPA as a first-generation college student. I obtained many technical skills by working on different computer software, hardware projects and through internship experience.

EDUCATION

University at Buffalo, The State University of New York **GPA: 3.75/4.00**

Bachelors of Science and Engineering in Computer Engineering *Dec 2019*

Relevant Courses: Machine learning, Computer Vision, Software Engineering, Microprocessor, Computer Architecture

KEY SKILLS

- **Programming Languages:** Java, C++, C, Python, Assembly Language(ARM/MIPS), Structural Verilog, HTML, CSS
- **Technical Skills:** Agile, FPGA, Git, Jira, MuleSoft, OOP, Real-Time Embedded Systems, React, Unix/Linux

EXPERIENCE

Liberty Mutual Insurance **Portsmouth, NH**

Software Engineering Intern *June 2019 - Present*

- Added feature to automatically close claims and handle errors in CounselLink app using MuleSoft
- Automate testing for ClaimCenter7 app and Spring Boot integration tests for CounselLink Micro-services with JUnit testing

University at Buffalo **Buffalo, NY**

Teaching Assistant *Aug 2018 - Present*

- Courses: Intro to Microprocessors (CSE379), Computer Organization (CSE341), Intro to Reasoning with Computing (CSE111)
- Hold office hours and lab for 100+ students a week and grade course work while balancing personal courses
- Teach students ARM Assembly, memory design and interface, interrupts, Python, HTML, MIPS Assembly, Structural Verilog, Computer Organization, and how to debug programs

CytoCybernetics **Buffalo, NY**

Software Engineering Intern *Jan 2019 - May 2019*

- Implemented drug dependency features to collect and display data using graphs on the Markov Model app using C, C++ and GTK

PROJECTS & RESEARCH

Bottom Hat

- Created a web app to take class attendance with a randomly generated QR code using HTML, CSS, JavaScript, Firebase, open source image processing library and QR code API
- Users are able to create accounts, login with their information, and store student attendance records using a real-time database

Embedded Systems Race Car Kit

- Designed and delivered car kits to 6th graders built with 3-D printed frames, Metro M0 board and encoder sensors
- These kits have interchangeable parts and sensors which allows it to detect time, distance, speed, and take input from users

ICAVE2 Research Project

- Researched the components required for an autonomous vehicle and the effect of cameras, radar and LIDAR sensor use
- Integrated the OBE devices with the on-board antennas using C and carried out on-field experiments

TableIt

- Implemented virtual white board web app using React during the Liberty Mutual Hackathon to increase meeting efficiency

Microprocessor Space Invaders

- Used ARM assembly language programming and C on an ARM microprocessor to implement Space Invaders game
- Accomplished this project by working with the memory design and interface, input/output concepts like GPIO, setting up and handling interrupts, timing considerations, system design techniques and debugging various problems

Ace up, Bakers Dozen, FreeCell

- Used Java to implement several solitaire games with test-driven development, object orientated programming and data structures

AWARDS & ACTIVITIES

- Awards: Dean's List @ UB(All Semesters), Presidential List @ HVCC(All Semesters), Mem of Phi Theta Kappa Honor Society
- Hackathons: Cornell University(2019), Liberty Mutual(2019), University at Buffalo(2017, 2018), University of Rochester(2018)