Mohammad T Hafeez

Computer Engineering Student & Software Engineering Intern

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EDUCATION

University at Buffalo **Buffalo, NY**
Bachelors of Science and Engineering in Computer Engineering *Dec 2019*
GPA: 3.75/4.00

Hudson Valley Community College **Troy, NY**
Associates of Science in Engineering Science *Aug 2017*
GPA: 3.77/4.00

KEY SKILLS

- **Programming Languages:** Java, C++, C, Python, Assembly Language, Structural Verilog, HTML, CSS
- **Software & Hardware Skilles:** Agile, FPGA, Git, Jira, Real-Time Embedded Systems, React, Unix

EXPERIENCE

Liberty Mutual Insurance **Portsmouth, NH**
Software Engineering Intern *June 2019 - Present*
- Added feature to automatically close matters in CounselLink application using Mule
- Automate testing for ClaimCenter7 application to test environment using JUnit test

University at Buffalo **Buffalo, NY**
Teaching Assistant *Aug 2018 - Present*
- Courses: Intro to Microprocessors (CSE379), Computer Organization (CSE341), Intro to Quantitative Analysis & Reasoning with Computing (CSE111)
- Hold office hours and lab for 100+ students a week and grade course work by balancing personal courses
- Teach students ARM Assembly, memory design and interface, interrupts, Python, HTML, MIPS Assemble, Structural Verilog, Computer Organization, and how to debug programs

CytoCybernetics **Buffalo, NY**
Software Engineering Intern *Jan 2019 - May 2019*
- Implemented drug dependency feature on the Markov Model application for cell research using C, C++ and GTK library

PROJECTS & RESEARCH

Bottom Hat
- Created a web app to take class attendance with a randomly generated QR code using HTML, CSS, and JavaScript
- Users are able to create accounts, login with their information, and store student attendance records using a real-time database (Firebase)
- Generate a random QR code using time stamps, class information and QR API. Decode QR code by reading camera input from a mobile device and with an open source image processing library

Embedded Systems Race Car Kit
- Designed and delivered car kits to 6th graders built with 3D frame, Metro M0 board, encoder sensors and more
- These kits have interchangeable parts and sensors which allows it to detect time, distance and speed

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 application 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

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)