Taha M. Rangwala

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OBJECTIVE

• I am a self-motivated and determined individual with the goal of gaining high level expertise in the field of Software Development and Computer Engineering. My interests include Machine Learning, Cybersecurity, and Data Science.

TECHNICAL SKILLS

- <u>Languages</u>: C++, Java, Python, C, HTML, CSS, JavaScript, PHP, Visual Basic, Assembly Language, Verilog, MATLAB in Windows environment. Some experience with the Linux environment
- APIs: OpenGL, WebGL, NumPy, OpenCV, VISA
- Applications: Visual C++, Eclipse, PowerShell, Code Composer Studio, Quartus. Website: https://taharangwala.com/
- Development Tools: CMake, Vagrant, Git Bash, Virtual Box, Node.js, QT. GitHub: https://github.com/taharangwala

EDUCATION

Virginia Polytechnic Institute and State University, B.S. Computer Engineering (GPA: 3.18) **Graduation May 2021**

- <u>Relevant Courses:</u> Senior Design, Embedded System Design, Real-Time Systems, Machine Learning, Intro to Computer Vision, Applied Software Design in C++, Data Structures and Algorithms with C++, Microcontroller Programming/Interfacing, Artificial Intelligence and Engineering Applications, Digital Image Processing, Network Application Design, Intro to Computer Engineering, Electric Circuit Analysis, Signals and Systems
- <u>Clubs/Organizations:</u> Cybersecurity Club, Students for Exploration and Development of Space at Virginia Tech (SEDS), Sigma Phi Delta Engineering Fraternity
- Senior Design: Developed a Universal Power Amplifier Test Controller for Radio Frequency Testing Equipment using a Raspberry Pi and the VISA API
- Embedded System Design Project: Designed and implemented the movement of a two-motor rover (Zumo) when interacting with a larger tri-wheeled rover and robotic arm in an engineering design team
- Applied Software Design Project: Composed a calculator application in C++ for large integers using QT and multithreading
- *Microcontroller Programming Project:* Devised an electronic Simon Game on a Microcontroller with pushbuttons, LEDs, joysticks, and light sensors using C

PROFESSIONAL EXPERIENCE

ShipFit, Full Stack Developer

Westford, MA | May 2020 - Present

- Designed packaging software that calculates the most efficient way to put items in a package
- Developed the backend software using C++ and OpenGL
- Created a website, https://shipfit.net/, with PHP, HTML, CSS, JavaScript, AJAX, and WebGL to make a user-friendly environment to run ShipFit (in alpha)

MIT Lincoln Laboratory, Research Intern (Canceled due to COVID-19) Lexington, MA | May 2020 – August 2020

• Planned to work with Digital Image Processing in the Integrated Systems and Concepts Group at MIT Lincoln Labs

Dassault Systèmes, Software Engineering Intern

Waltham, MA | May 2019 - August 2019

- Formulated client care support system using Java and Drools business rule management engine
- Established novel on-boarding site for partners employing gamification with HTML, CSS, JavaScript, and PHP
- Created new badging system for use as employee incentive tool with PHP and MySQL Database Management System

Avid Technologies, Capstone Engineering Intern

Westford, MA| April 2017-May 2017

• Developed Tic-Tac-Toe and FlexFit Fitness App using Java and XML in Android Studios

LEADERSHIP EXPERIENCE

Boy Scouts of America, Eagle Scout

Westford, MA| June 2010 – June 2017

- Completed Eagle Scout Service Project designing and heading construction of boardwalk for Westford Public Schools
- Served as Troop Guide, Instructor, and Junior Assistant Scoutmaster directing outings and guiding younger scouts

BSA Philmont Scout Ranch Crew Leader

Cimarron, NM| July 2016 - August 2016

- Elected to lead Boy Scout Crew through 100+ miles of backcountry mountain range hiking
- Responsible for conflict resolution, team cohesion, group communication

INTERESTS

- Proficient in Microsoft Word, Excel, PowerPoint
- General: Exercise, running, classical piano, unicycling