CHAU LE

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EDUCATION

BS in Computer Engineering focus in Software Systems, Minor in Computer Science GPA: 3.67/4.00
Virginia Polytechnic Institute and State University, Blacksburg, VA Expected graduation: May 2023

EXPERIENCE

Virginia Cyber Range – Software Developer Intern May 2022 – October 2022
Blacksburg, Virginia

- Developing Audit API, which enable administrators and developers to be able audit events from users assisting customer service, in a microservice architecture
- Implementing ~100 auditable events; working across 10+ APIs for implementing Audit feature
- Working within a Scrum Agile Team, contributing code and tests under CI/CD
- Conducting unit tests with Mocha, utilizing AWS DynamoDB for database management

PROJECTS

Embedded HMI for Monitoring and Controlling Power Electronics Building Blocks September 2022 - Present

- An embedded touch interface HMI that allows a user to set different variables need for seamless operation of the PEBB and observe measured values and plot them
- Qt-based touch interface controlled by a Raspberry Pi 4. Wireless communication via MQTT.

MIPS Debugger August 2021 – December 2021

- A C++ Qt-based graphical MIPS debugger that reads MIPS assembly code and simulate program execution
- Multithreaded application that enables users to monitor/control the program in real-time

TetroRhythm July 2021 – December 2021

- A rhythm puzzle game that requires you to constantly place blocks to the beat
- Includes 4 modes: Auto Drop, Drop On Beat, Limited Time, Endless
- Includes a Beat Map Editor for creating new beat maps
- Developed in C++ and used SFML library for graphics

Smart Home Project January 2021 – May 2021

- In a team of 2, developed a home automation prototype controllable by a computer GUI application via Bluetooth
- Designed circuits for 5+ components including audio amplifier, Bluetooth, temperature & humidity sensor, etc.
- System was controlled by Arduino UNO and a computer GUI developed using Processing IDE

EXTRACURRICULAR ACTIVITIES

Astrobotics at Virginia Tech – Controls Team Member September 2019 – May 2021
Blacksburg, VA

- A design team with the goal of building an autonomous mining robot for NASA Lunabotics competition
- Wrote Arduino class methods for electronic components including beacon, ultrasonic sensor, actuator, etc.
- Assisted researching components/firmware for implementation of the electronic box

RELEVANT COURSEWORK

- Computer Systems, Large-Scale Software Development for Engineering Systems, Intro to Computer Networking

SKILLS

- Proficient in C, C++, Qt, Linux, Git, Scrum, Arduino, JavaScript/Typescript (NodeJS, ReactJS, Angular), HTML/CSS, AWS DynamoDB, MongoDB, Mocha
- Novice in FreeRTOS, Raspberry Pi, MSP430, Electrical Engineering, Java, Python, Shell Scripting