Anthony Dinh Nguyen

anthonydinhnguyen251176@gmail.com | (503) 807-8633 | github.com/ninjaco1 | www.linkedin.com/in/nguyean6 | Portland, OR

EDUCATION

College of Engineering, Oregon State University, Corvallis, OR
Bachelor of Science, Electrical and Computer Engineering **June 2022**
Minor in Computer Science
Cumulative GPA: 3.81, Major GPA: 3.84
Relevant Coursework: Cyber Attack & Defense, Microcontroller System Design, Computer Organization and Assembly Language Programming, Operating Systems

EXPERIENCE

Undergraduate Learning Assistant **March 2021 - Present**
Oregon State University, Corvallis, OR

- Enhanced students' understanding of programming fundamentals in **C++** by 76% within 11 weeks
- Led group study session and guided undergraduate students through fundamental programming concepts
- Evaluated students' performance and revised lesson plans to facilitate a student-centered learning environment

PROJECTS

Radio Alarm Clock **September 2021-December 2021**

- Designed an embedded control system that uses **SPI** and **Timer/Counter** to control LEDs, clock, speaker
- Programmed on the **ATMega128** microcontroller using **C** to set the values **SPI**, **Timer/Counter**, I/O ports
- Calculated frequencies, and Fast PWM values for volume control for the speaker

Hyper Rail **January 2021 - March 2021**

- Implemented a G-Code parser which was displayed on a Graphic User Interface (GUI) created in **Python**
- Constructed edge detection, which illustrated an image using **MATLAB** and **Python**
- Composed Arduino to reads G-Code commands for the module to move a certain distance

Microphone Amplifier **October 2020 - December 2020**

- Produced microphone with Arduino reading at different frequencies to send signals to MATLAB
- Developed an Arduino to identify notes being played while switching 7 different LEDs
- Circuit was designed and simulated in **LTSpice**

Data Harvester **October 2020 - December 2020**

- Conducted a website containing data using **ReactJS** to build front end and Python for back end along with teammates
- Created a space where people can upload and browse through data
- Managed **GitHub** to share project with team members

EXTRACURRICULAR ACTIVITIES

OSU Security Club **September 2018 - Present**

- Learned fundamentals of security while applying knowledge in CTFs and CDCs
- Weekly CTFs challenges, reverse engineering x86 assembly with Ghidra, gdb, and Python
- Worked together as a team to tackle challenges to get the flag

SKILLS

Programming Languages: Python, C/C++, x86, AVR, JavaScript, HTML, CSS, ReactJS, SQL
Software: Ghidra, gdb, Pwntools, Git, Terminal, AVR Assembly, LTSpice
Hardware: ATMega Microcontroller, Arduino, Oscilloscope, and Frequency Generator

INTERESTS

Security, Embedded System, Firmware, Tennis