Nicholas Young

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EDUCATION

University of Michigan Ann Arbor, MI   April 2020, April 2021
Master of Science in Engineering in Electrical and Computer Engineering, Embedded Systems   GPA: 3.75 / 4
Bachelor of Science in Engineering in Computer Engineering, Summa Cum Laude   GPA: 3.78 / 4
International Engineering Minor
Coursework: Advanced Embedded Systems, Engineering Interactive Systems, Introduction to AR/VR Application Design
Computational Data Science and Machine Learning, Introduction to Operating Systems, Data Structures and Algorithms

SKILLS

Programming
- Proficient in: C, C++, Python, SystemVerilog
- Experience with: Verilog, ARM, MATLAB, HTML/CSS/Javascript

Debugging
- Capable of efficiently diagnosing failures through error signatures, log file outputs, and waveforms

Software Development Computer Skills
- Adept at using the Linux operating system and command line interfaces in code development workflows
- Experienced with using Git to keep track of code revisions in both individual and collaborative repositories

WORK EXPERIENCE

Intel Pre-Silicon Hardware Validation Engineer   June 2021 - Present
Intern   May 2019 – August 2019, May 2020 – August 2020
- Collaborated with colleagues to uncover bugs and ensure the health of Intel's processors before being made in silicon
- Utilized Scrum development with co-workers to ensure as much processor functionality as possible is properly tested
- Constructed tests and debugged failures to discover and help correct errors in the processor design

PROJECT EXPERIENCE

NicholasYoung.info Developer   August 2023 - September 2023
- Independently produced a personal website to host information about myself using HTML, CSS, and Javascript
- Hosted this website using a Raspberry Pi 3B+ running nginx and connecting to the web through a Cloudflare Tunnel

C++ LZW File Compression Implementation Developer   August 2023
- Created a program to compress and decompress files based on my implementation of the LZW compression algorithm
- Achieved over ninety percent compression in certain cases while being able to decompress the file without data loss

Python New Car Detector Developer   April 2022
- Designed a program to harvest data from websites of nearby car dealerships to find new vehicles of a specific model
- Conveyed this information to myself through a Discord bot I programmed using a python wrapper for Discord's API

Gesture Controlled Mobile Nerf Turret Developer   February 2019 – April 2019
- Used accelerometers, IMUs, and flex sensors to manually aim and shoot, and a color sensor for automatic aiming
- Employed radio communication, DC motors, and servos to wirelessly drive and aim the turret
- Designed and coded gesture control in C and a basic target tracking algorithm in ARM

LEADERSHIP

Boy Scouts of America Eagle Scout   June 2009 - June 2016
- Recruited and supervised a team of scouts in rebuilding a heavily damaged bridge and refurbishing connecting trails
- Planned, designed, and raised funds for my Eagle Scout project to achieve the rank of Eagle Scout
- Earned 21 merit badges, including Citizenship in the World, Emergency Preparedness, and Communications
- Managed younger scouts and supported other members as Assistant Senior Patrol Leader