

Nicholas Young

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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 Intern

June 2021 - Present

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
- Produced and executed detailed plans for validating complex systems in order to keep mistakes to a minimum
- Constructed tests and debugged failures to help discover and correct errors in the processor design
- Composed python scripts to help simplify and accelerate my team's normal workflow and increase productivity

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

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

ADDITIONAL QUALITIES

- **Quick Learner** - Able to adapt to new situations and learn new skills quickly in order to fulfill various roles
- **Eagle Scout** - Achieved the rank of Eagle Scout, the highest rank in Scouting
- **Japanese Language** - Capable of speaking and writing basic Japanese
- **Video Games and Virtual Reality** - Enjoys playing video games, especially those using virtual reality technologies