

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

June 2021 - Present

Intern

May 2019 – August 2019, May 2020 – August 2020

- Member of a team responsible for validating the design of Intel's next generation computer chips
- Utilized Scrum development methodology to collaborate with coworkers and complete projects efficiently
- Programmed validation test scenarios that simulate the processor to help identify potential design flaws
- Composed python scripts to help simplify and accelerate my team's normal workflow and increase productivity
- Uncovered a large bug missed by previous teams, allowing it to be fixed just as the chip was being made in silicon
- One of only a few engineers granted full administrator privileges to control updates to the validation codebase
- Selected to work with an international team on a six month assignment to enhance cross team collaboration

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

PREVIOUS PROJECT EXPERIENCE

Gesture Controlled Mobile Nerf Turret University of Michigan

- 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

NicholasYoung.info

- 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

- 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

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
- **Hobbies** - Enjoy fencing, snowboarding, drawing, video games and virtual reality