

Zachary Wilson

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EDUCATION

Brigham Young University – Idaho

Bachelor of Software Engineering
Emphasis in Embedded Systems

Rexburg, ID
Expected Dec 2024

SKILLS

Technical Skills: Python, C, C++, C#, Java, HTML/CSS, Linux Scripting, SQL, Assembly (x86 and ARM), GNU Debugger, Competent with STM32 Microcontrollers, SystemVerilog

Soft Skills: Leadership, Mentoring, Teamwork, Communication

Certification: SOLIDWORKS Associate Certificate in Mechanical Design

Languages: Fluent in Spanish and English

PROJECTS

APOLLO 11 LUNAR LANDER SIMULATOR

Apr 2024

- Collaboratively developed a lunar lander simulator in C++ with a two-person team
- Implemented user controls allowing operations of the lunar lander via keyboard

M777 HOWITZER ARTILLERY SIMULATOR

Feb 2024

- Contributed to a team effort to create a howitzer artillery simulator in C++
- Calculated and displayed trajectory and hang time of 155mm artillery shells

ROOM SCANNER

Dec 2023

- Independently created a room scanner using C and Python
- Utilized an ultrasonic sensor on a servo to scan rooms, transmitting data to a laptop for recreation

HOME SECURITY SYSTEM

Oct 2023

- Solely designed and implemented a home security system using C
- Incorporated user inputs and sensors with hardware interrupts on an STM32 Nucleo board

ANT SIMULATOR

Apr 2023

- Collaborated with a four-person team to develop an ant simulator game in Rust
- Created a 2D colony simulator where users strived to survive with a colony of ants

WORK EXPERIENCE

Arborist Crew

Crew Coordinator

Rexburg, ID
Mar 2021 – Present

- Lead and trained crew members on various pruning and tree climbing techniques
- Taught chipper and chainsaw safety briefings
- Lead various size teams ranging from three to eight team members