

Sophomore, Cornell University Email: quantumleo78@gmail.com Phone: 303-941-7253

Github: https://github.com/hhe07 Website and portfolio: https://hhe07.github.io

Skills

Looking for an internship in computer engineering or software development with interests in embedded engineering, computer architecture, and back-end programming

Programming: Golang, C/C++, Verilog, Python, Java/JavaScript

Version Control / Software: Git, Eagle, VSCode, Vivado, GCC, Arduino, Unix utilities

Language: Native English, proficient Chinese / Spanish

Education

Excludes 73 credits from AP/IB exams at CU.

Cornell University

B.S., Electrical and Computer Engineering

University of Colorado at Boulder

B.S., Electrical and Computer Engineering (transferred)

Fairview High School

32 Credit Hours (expc.) Aug. 2023 - May 2026 (expc.) 4.0 GPA, 35 Credit Hours Aug. 2022 - May 2023

Graduated, Sigma Cum Laude

Notable Coursework

Cornell: ECE3250 (Introduction to Signals and Systems); ECE2100 (Introduction to Circuits);

ECE2720 (Data Science)

CU: CSCI 2270 (Data Structures); ECEN 2350 (Digital Logic)

Experience

CU Summer Program for Undergraduate Research (hybrid)

2023

Created benchmarks to test for three Spectre-type vulnerabilities on a host operating system and the gem5 simulator. Gained *computer architecture* and *lower-level programming* experience. (link)

Learning Assistant for CSCI 1300 (in-person)

2023

Mentored students through their learning in the principles of C++. Improved technical communication skills and my own understanding of the language.

IB Extended Essay 2021-2022

Programmed and benchmarked the rope and gap buffer data structures using *Golang*, determining adherence to time complexity models, gaining experience with *data structures* and *automated program testing*. (link)

CS@Mines Summer Internship (virtual)

2021

Created FOSS interactive webapp to help people efficiently water their lawns using JavaScript and React as part of front-end development. (link)

FRC Robotics Team #2036

2018-2022

Programmed and tuned a robot's control systems using *Kotlin* as teleoperated programming lead. Developed *embedded engineering* and *software testing / integration* skills. (<u>link</u>)

Volunteer at Media Archaeology Lab (on location)

2016-ongoing

Acting as museum docent giving tours, enhancing communication skills. Currently repairing 1960s video game console, improving analog electronics and reverse engineering skills. (link)

BuildARobot Volunteering (in-person and virtual)

2017-2022

Taught K-8 students how to build robots, program them with a block-based language, and apply STEM concepts; fostered their interest in STEM fields.

See my portfolio for personal / class projects.