

XIAOKANG CHEN

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<https://xiaokchenedu.github.io/>

EDUCATION

University of Hawai'i at Mānoa
Bachelor of Science, Computer Engineering

Honolulu, Hawaii
Aug 2021 – Expected Graduation Fall 2024

University of Hawai'i at Mānoa
Master, Electrical Engineering

Honolulu, Hawaii
Aug 2024 – Expected Graduation Fall 2025

RELEVANT COURSEWORK

Electrical: Circuit Analysis I, Circuit Analysis II, Physical Electronics, Discrete Math for Engineers, Engineering Electromagnetic I, Signal and Systems Analysis, Microelectronic Circuits I, .

Computer: Programming for Engineers (Python), Object Oriented Programming (C/C++), Introduction to Digital Design, Introduction to Computer and Network Security, Digital Systems and Computer Design, Computer Data Structures and Algorithms, Operating System, Computer Architecture.

EXPERIENCE

Cyber Security Training
Office of Naval Research ROTC Cyber Security Training Program

Honolulu, Hawaii
Sep 2022 – May 2023

- Learn the basic of Linux and security tools to examine computer and network security.
- Work on computer and network security, drones, Internet of Things (IoT), cloud, and mobile systems.
- Virtualization through type 2 hypervisor.

PROJECTS / PROGRAM

Radar/Radio Project | IEEE Paper

Aug 2024 – Present

- Delves into the exploration of an 8-element antenna array system, specifically designed for beamforming and scanning applications. By leveraging SBench6, we capture the data from the eight individual antennas. Subsequently, the collected data undergoes comprehensive signal processing utilizing MATLAB
- Reproducing a radar system for a Wireless Monitoring System designed for comprehensive microwave-based vital sign measurement

Aerospace Technologies: Team Laniākea | <https://www.teamlaniakea.com/>

Jan 2024 – Aug 2024

- Create a functional, low cost satellite to take a picture of the Hawaiian Islands from space.
- Engaged in tasks involving solar cells and antennas.

UHM SCADA LAB | <https://uhm-scada-lab.github.io/>

Sep 2023 – Dec 2023

- Designed and implemented a miniature town model to visually represent the principles of two closed-loop systems and one open-loop system.
- Engaged in Raspberry Pi programming using Python, concurrently applying circuit design principles that incorporated relays, motors, water level sensors, and other components.

ALU Project | <https://xiaokchenedu.github.io/projects/ALU.html>

Nov 2022 – Dec 2022

- Created a combinational digital circuit featuring 8 distinct operations, each operating on 4 bits.
- Designed and simulated the 8 different operations using Falstad, and subsequently implemented the combinational circuit in Verilog

UHM ICSpark Program | <https://icspark.github.io/>

Jun 2021 – Aug 2021

- Intro to Web Development Course.

TECHNICAL SKILLS

Computing: C, C++, Python, HTML/CSS, Javascript, MATLAB, LaTeX, Verilog, VHDL

Tools: Visual Studio Code, JetBrains, Vim, Git, Linux/Unix, VitruualBox, VMWare

Languages: Mandarin (Native), English (Fluent)