Jaxson Pahukula

Computer Science Student from Maui. HI

jaxsonp.com jaxpahu@gmail.com (808) 740-5007

EDUCATION

Purdue University - West Lafayette, IN

- Pursuing B.S. in Computer Science, with concentration in systems programming
- Aug 2022 May 2025 (exp.)

SKILLS

Proficient Languages

Rust, Python, C/C++, Java, JS, Shell scripting, HTML/CSS, SQL

Tools and Environments

Unix, Git, Wireshark, Jupyter, Docker, Ghidra,

HIGHLIGHTED PROJECTS

CHIP-8 Emulator – A full emulator of the original COSMAC VIP interpreter, written in Rust. Includes example ROMs and an elementary assembler.

SCI-CALC – A fully-functional scientific calculator rust crate and CLI. Features variable recall, builtin functions, error handling and more.

Simple C Compiler – A compiler for a subset of C with reduced functionality. Compiles to x86 assembly, made for a computer architecture class.

RELEVANT COURSES

- Systems Programming
- Computer Security
- Computer Architecture
- Data Structures and Algorithms

HOBBIES

- Coding (See github :D)
- Playing the drums (also trying to pick up the bass)
- Volleyball

EXPERIENCE

Griffiss Institute, VICEROY Maven – *Intern*

(Summer 2024)

- Participated in cybersecurity lessons with various DoD personnel on Air Force and DoD-oriented cyber missions
- Was selected to represent VICEROY and P3I at the Pentagon, presented to HON Shyu, and dialogued with Hawai'i's Sen. Hirono, Sen. Schatz, Rep. Case, and Rep. Tokuda
- Worked on a research project with the Air Force Research Lab.

Applied Research Laboratory at the University of

Hawai'i – Software Dev Asst. / Intern

(Summer 2023)

- Collaborated on a team researching new technologies for portal software for the DoD's vanguard high performance computing center
- Developed backend software for a central administration platform for managing containerized software on servers and swarms at a high performance computing center.

The Data Mine, Purdue – *Undergraduate Data Science Researcher*

(Aug. 2023 - May 2024)

• Collaborated with Raytheon Technologies to create a hard drive remaining-useful-life prediction model, applying methods such as anomaly detection, k-means clustering, LSTM models, and more.

Data Science Labs Calculus – *Lab Instructor / TA*

(Jan. 2023 - Dec. 2023)

- Collaborated with other instructors to develop and refine the course curriculum.
- Taught students to apply concepts from Calculus I and II to basic data science problems using Jupyter, Python, Raspberry Pi's

EXTRA-CURRICULARS

B01lers CTF Competitive Hacking Team – *Officer*

(Aug. 2022 - Present)

 Competed and collaborated to place in CTF (capture the flag) competitions across the nation, and developed challenges for our own titular CTF.

MIT Beaver Works Summer Institute – Student,

Embedded Security Program

(Summer 2021)

• Learned and practiced embedded security under MIT and Mitre professionals, and competed in a capstone CTF competition.

VOLUNTEER WORK

Maui Wildfire Disaster Relief (Aug 2023)

• Organized shelter resource databases, helped coordinate and participated in supply runs via boat to Lahaina.

Church Volunteer Work (2017-present)

- I serve regularly on the worship band at both Grace Bible Church Maui in Hawai'i and Faith Church Lafayette in Indiana.
 - I participate in many outreaches such as an after-school program in an under-priveleged neighborhood, non-profit construction projects, frequent church community events, and more.