

# Jaxson Pahukula

Computer Science Student  
from Maui, HI

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## 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.

### 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-privileged neighborhood, non-profit construction projects, frequent church community events, and more.