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 security
- Aug 2022 – May 2025 *(exp.)*

SKILLS

Languages
Rust, Python, C, Java, Javascript, Shell scripting, HTML/CSS, SQL

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

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 at the Air Force Research Lab – *Intern*
(Summer 2024)
- Participated in cybersecurity lessons and lectures from various DoD personnel on Air Force and DoD oriented cyber missions.
- Performed a DoD-standard vulnerability assessment of a foreign cellular infrastructure system.

Applied Research Laboratory at the University of Hawai'i – *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.