

Maya Wallach

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PERSONAL

Date of Birth: September 10, 2005

Place of Birth: Richmond, VA

EDUCATION

Michigan State University, East Lansing, MI

BS Physics

Aug 2021 - May 2024

Graduated with Honors

RESEARCH/WORK EXPIRENC

FermiLab, Batavia, IL

May 2023 - present

Student Researcher

- Use Machine Learning models for Identifying/Classifying tracks in a bubble chamber
- Project page: [here](#)

IRIS-HEP @ Davidson College, Davidson, NC

May 2022 - August 2022

Undergraduate Fellow

- Track Classification @ AT-TPC using Unsupervised Learning methods
- Presented at the annual Division of Nuclear Physics meeting in 2022

Los Alamos National Lab, Los Alamos, NM

September 2021 - September 2022

Undergrad Research Assistant

- Use computational methods to simulate the k-L turbulence and Rayleigh-Taylor models

Facility for Rare Isotope Beams, East Lansing, MI

August, 2020 – present

Undergrad Research Assistant

- Predicting unstable particle radii using computational methods

Michigan State University

June 2020 – August 2020

High School Physics Intern

- Studied Zeeman effect using Python and derivation

PROJECTS

KlaudOS

Klaud themed hobby operating system

- Double Stage bootloader
- FAT12 file system
- Interrupts/FPU support
- Interactive shell with [commands](#)
- Languages: C and x86 asm
- Project page: [here](#)
- Demo video: [here](#)

Klaud File System

Klaud themed file system

- UNIX like commands (mkdir, cd, ls, etc)
- Based off of FAT file system
- Languages: C
- Project page: [here](#)

KlaudOS Website

The official KlaudOS Website

- HTTP web server in C
- Gives information on KlaudOS
- Languages: C, HTML, CSS
- Project page: [here](#)

Personal Website

Static Portfolio Website

- Languages: HTML, CSS, JavaScript
- Website: [here](#)
- Project page: [here](#)

Solved CrackMes

A repo of some crackme's I've solved

- Languages: C
- Project page: [here](#)

SKILLS

Programming Languages – Python (5 years), C/C++ (5 years), Bash (1 year), R (3 years), JavaScript (4 years), HTML/CSS (4 years), Rust (1 year), x86 Assembly (1 year)

Frameworks – Pytorch (3 years), Tensorflow (3 years), scikit learn (3 years), OpenCV (4 years)

Computer Skills – Linux (Debian and Arch) Operating Systems (4 years), Windows Operating systems (10 years), Git (4 years), Microsoft Office (5 years), LibreOffice (4 years)

Other – Ghidra (1 year), Radare2 (1 year), IDA Pro (1 year)