

# Maya Wallach

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## PERSONAL

**Date of Birth:** September 10, 2005  
**Place of Birth:** Fredericksburg, VA  
**Citizenship:** United States

## EDUCATION

**Michiagan State University, East Lansing, MI**  
BS Physics  
*Aug 2021 - May 2024*  
Graduated with Honors

## RESEARCH/WORK EXPIRECE

**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

- Simple and Interactive UI
- RuneScape cursors
- Languages: HTML, CSS, JavaScript
- Website: [here](#)
- Project page: [here](#)

## SKILLS

**Programming Languages** – Python (5 year), 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)

**Personal Interests** – Computer Science, Reading, Sports, Music