# 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 EXPIRENCE

FermiLab, Batavia, IL

May 2023 - present

**Student Researcher** 

 Use Machine Learning models for Identifying/Classifiying 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 turbulance 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
- Interupts/FPU support
- Interactive shell with commands
- Languages: C and x86 asm
- Project page: <u>here</u>Demo video: here

### **KlaudOS Website**

The official KlaudOS Website

- HTTP web server in C
- Gives information on KlaudOS
- Languages: C, HTML, CSS
- Project page: <u>here</u>

### **Personal Website**

Static Portfolio Website

- Simple and Interactive UI
- RuneScape cursors
- Languages: HTML, CSS, JavaScript
- Website: <u>here</u>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