

Minsi Hu

 minsihu.com |  [minsi-hu](https://www.linkedin.com/in/minsi-hu) |  minsihu2004@gmail.com |  [Mimsqueeze](https://github.com/Mimsqueeze)

Education

University of Maryland, College Park (UMD)

GPA: 4.00 / 4.00

University Honors (UH) Program

Expected May 2026

- ❖ B.S. Computer Science (Machine Learning Track)
- ❖ B.S. Mathematics (Applied Math Track)

Relevant Coursework and Grade

- ❖ *Courses Completed*: Calculus III | Linear Algebra | Differential Equations | Discrete Structures | Object Oriented Programming II | Computer Systems | Web Development with JavaScript
- ❖ *Courses In Progress*: Organization of Programming Languages | Algorithms | Data Science

Work Experience

Teaching Assistant | [University of Maryland](https://www.universityofmaryland.edu/)

August 2023 – Present

- ❖ Teaching Assistant for the CMSC216: Introduction to **Computer Systems** and STAT410: Introduction to **Probability Theory** courses.

WHK Student Intern | [National Cancer Institute \(NCI\)](https://www.nationalcancerinstitute.gov/), [Dr. Kylie Walters](#)

June 2021 – May 2022

- ❖ Conducted research on the **USP14 inhibitor** under mentor Dr. Kylie Walters and her team, and used PyMOL to generate protein models of enzymes in the ubiquitin-proteasome pathway.

Python Instructor | [Frederick Chinese School](https://www.frederickchineseschool.org/)

August 2021 – May 2022

- ❖ Facilitated a weekly **Python** course for middle and high school students, providing comprehensive instruction and guidance.

Personal Projects

[Digit Recognizer](#) | C++

May 2023 – Present

- ❖ Developed a C++ implementation of a **convolutional neural network** from scratch, utilizing deep learning techniques and linear algebra to recognize handwritten digits from the [MNIST](https://mnist.github.io/mnist-dataset/) database.

[Mims' Rucoy Calculator](#) | Python & Java

September 2020 – October 2023

- ❖ Launched an intelligent utility Discord bot using **Java Discord API**, deployed in over 4800 servers, assisting thousands of users daily in optimizing their gameplay.

[Rucoy Vision Bot](#) | Python

June 2023 – July 2023

- ❖ Implemented an image recognition application using **OpenCV** and **PyAutoGUI**, which captures screen images, identifies targets, and automates actions to improve a user's experience in a multiplayer game.

[Sorting Simulator](#) | Java | Bitcamp 2023

April 2023 – May 2023

- ❖ Designed a sorting algorithm visualizer using **Java Swing** to showcase real-time updates to arrays as 10 different sorting algorithms are applied.

Skills

Languages | C++, C, Java, Python, SQL, Javascript, Typescript, C#, OCaml, Rust

Other | HTML, CSS, React, MySQL, Pandas, MATLAB, MongoDB, Express, Node, Unity, Git, LaTeX