# Meredith Hu

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**GitHub**: github.com/meredithmhu **LinkedIn**: linkedin.com/in/meredithhu

### **Education**

Cornell University, Ithaca, NY

May 2024

Bachelor of Arts Double Major: Computer Science and Classics

**Relevant Courses:** Data Structures, Algorithms, Computer System Organization, Functional Programming, Formal Verification, Programming Language Theory, OS, AI, Linear Algebra, Probability, Discrete Math

## **Work Experience**

Capra CS Lab, Ithaca, NY — Undergraduate Research Assistant

May 2022 - Present

- Developed assembly level benchmarks to test features for a research language including binary operators, GPU externalization, and program synthesis.
- Automated testing of runtime metrics and statistic generation for benchmarks with scripting in Python.
- Created documentation for project compiler setup and assembly benchmark writing.
- Modeled an algorithmic problem using Python for the Z3 SAT solver to further formal verification skills.

#### **Cornell Tech**, New York, NY — *Intern*

June 2021 - August 2021

- Delved into coursework on tech ethics, software development tools, and the business practices of successful startups in New York City for the Cornell Milstein Program.
- Discussed city infrastructure problems with City of New York representatives and designed short-term software solutions. Completed software development databases internship for NYC nonprofit HeatSeek, reorganizing HeatSeek's backend data into Airtable.

**ReLearn**, Ithaca, NY — Lead Designer and Operations Officer

Jan 2022 - June 2022

- Led design efforts on ReLearn, a Cornell-student founded collaborative studying app, by analyzing user needs and communicating design plans to developers.
- Planned and ran workshops for beta testing of new feature on 40+ people in Cornell classes and conducted user interviews on 15 users.
- Organized and led 4 campus outreach events and one sponsored promotional event. Executed social
  media campaign on Instagram and university wide poster advertisement campaign for events.

## **Projects**

m-Interpreter (Java) github.com/meredithmhu/m-interpreter

Sept. 2024 - Present

- Built interpreter in Java for a programming language with basic data types, expressions, statements, and variables to learn more about program execution principles.
- Applied skills previously learned in a programming languages class, such as interpreter writing and programming language design. Currently implementing control flow elements.

My Website (Materialize) github.com/meredithmhu/meredithmhu.github.io

Oct 2018 - Present

• Created a website using the Materialize CSS Framework. Website includes navigable menu bar, interactive portfolio of previous and current software projects, up-to-date resume and personal interests.

#### **FAT File System** (C)

Apr 2024 - May 2024

- Collaborated with a partner on creating a simulated FAT File System in C for an operating system for Cornell's project-based operating systems class.
- Project involved writing low-level code susceptible to breaking often, so skills learned involved an increased familiarity with Valgrind, the C compiler, gdb, and Makefiles.

Programming Languages: Python, Java, C, OCaml

Front-end Development Tools: Materialize, GitHub Pages

Developer Tools: Git, GitHub, Bash, Make, VS Code, IntelliJ, Eclipse, Airtable

Design Tools: Adobe Illustrator, Canva, Blender