

# Ava Hajratwala

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## EDUCATION

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**Barnard College, Columbia University** | New York, NY | *B.A Computer Science* Expected May 2025, Dean's List (Fall 2021, Spring 2022, Fall 2022) GPA: 3.800

**Saline High School** | Saline, MI | September 2017 – May 2021 | Class Rank: 3/416

- National Merit Scholar
- Recipient of the Compass Award for mastery in communication, collaboration, creativity, and critical thinking skills.

## PROJECTS

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**Reinforcement Learning Stick-Shift Simulation** | Summer 2023

- Built a 3D manual transmission driving simulation in Unity game engine (C#).
- Developed, tuned, and trained a Q-learning agent to learn how to operate a manual transmission from scratch.

**Dynamic Web Server and Client** | *COMS 3157 (Advanced Programming)* | Fall 2022

- Implemented client and server sides of a dynamic web server that searches a database and displays the search results (rendered HTML) from a client-submitted query. Written in C using the Socket API.

**Neural Network** | *COMS 4701 (Artificial Intelligence)* | Spring 2023

- Implemented a fully connected neural network from scratch in Python.
- Trained and tuned the network to identify handwritten digits from the famous MNIST dataset.

**Personal Website** | April-May 2023

- A personal website and project showcase for potential employers, written using the Fomantic-UI CSS framework and HTML5.

Source code and complete project list is available through my website, <https://avahajr.github.io>

## WORK EXPERIENCE

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**Columbia Disability Services** | New York, NY | *Peer notetaker* Spring 2023 Semester

- Selected to take detailed lecture notes on all lectures for my classes in Computational Linear Algebra and Artificial intelligence, logged and submitted weekly to students who request them.

**Meijer Great Lakes LLC** | Ann Arbor, MI | *Cashier*

**U.S. House Campaign, Gretchen Driskell** | Saline, MI | *Campaign Intern* October – November 2020

- Organized, trained, and led groups of volunteers making calls on behalf of Candidate Gretchen Driskell

**U.S. House Campaign, Solomon Rajput** | Ann Arbor, MI | *Campaign Fellow* March 2020 – Jan 2021

- Made over 700 phone calls and canvassed over 150 houses on behalf of Candidate Solomon Rajput

## TECHNICAL SKILLS

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**Programming Languages:** Python (NumPy, Pandas, Matplotlib), Java, C/C++, C#, HTML5, CSS

**Other:** Git version control & GitHub, Microsoft Excel, LaTeX/KaTeX typesetting