

ADVAY SINGH

📞 (425)443-1821 ✉️ advay@umich.edu [in](#) [Linkdin](#) [github](#) [advaysingh1.github.io](#)

Education

University of Michigan

Ann Arbor, MI

Bachelors of Science in Data Science, 4.0 GPA

Expected - May 2026

- **Selected Coursework:** Electrical Engineering and Computer Science, Discrete Mathematics and Calculus Statistics, Data Structures and Algorithms, Research Capstone, Economics, Academic Writing
- **Awards:** Branstorm Freshman Prize, William and Mary Jo MacDonald Scholarship, Clement Muller Leadership Award

Technical Skills

Languages: Python, C++, C, Java, HTML, CSS, SQL, Bash

Developer Tools/Frameworks: Visual Studio, XCode, Slack, GitHub, Terminal, Processing, NumPy, Tensorflow, Excel, Cloud Computing, Version Control, CLI Shell

Certifications Machine Learning A-Z - Udemy

Data Science and Ethics - Coursera | Data — What It Is, What We Can Do With It - Coursera

Experience

Michigan Data Science Team

Ann Arbor, MI

Web-Scraping Engineer

Aug 2023 - Dec

- Collaborative project. Gained web-scraping experience familiarizing beautiful soup library. Generated weekly refreshing "Shein E-commerce Price Tracker" with email based UI. Technologies: Terminal, Python, HTML, Jupyter Notebook, Selenium, BeautifulSoup, Action Chains, imap and smt libraries.

Project Lead Training Manager

Dec 2023 - Present

- Work closely with project leads managing 30+ engineer teams. Attain leadership and managerial experience.

Neural Network Engineer

Feb 2024 - Present

- Developer multi-layered neural networks from scratch. Implement them to classify various visual datasets. Gain experience with Perceptrons, gradient decent, and mathematical functions: Sigmoid, RELU, Linear, etc.

Captiva AI

Remote

AI Intern

Jan 2024 - Present

- Lead targeted campus outreach campaigns, employing technical marketing language to elevate Captiva AI's product visibility, resulting in heightened brand recognition and user engagement.
- Collaborate with the lead AI developer for customer retention data analysis, contributing to strategic insights and implementing data-driven initiatives to enhance user satisfaction and loyalty.

Michigan Journal of Economics

Ann Arbor, MI

Researcher/Writer

Aug 2023 - Present

- Economic researcher and writer. With interest in economic impacts of AI and usage of ML models for financial predictions. Currently implementing regression models in Anti-Trust and HHI research.
- Publication: "AI on the Labor Market"

Projects

Decision Support System for Skin Disorders

Apr 2022

- Languages and technologies: Python, HTML, Google Colab, Jupyter Notebook, Tensorflow, Xcode.
- Research focused on the facilitation of skin disorder diagnosis through ML rather than clinical prognosis. Employed pre-existing, multi-layered Convolutional Neural Networks fine-tuned for HAM10000 dataset.
- Discovered numerical concepts behind convolution, pooling, and feature detection. Accessed pre-trained CNNs (DesNet, AlexNet, etc.)

Arudino Matrix Panel Game board

Nov 2023

- Using Arduino IDE, Arduino Uno, matrix panel, potentiometer, and other sensors, developed Space Invaders and Flappy Bird. Managed a team of 3 developers in other Arduino game development projects.
- Attained circuitry and mechanical engineering experience in tandem with back end development in C/C++.