

Andrew Wang

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EDUCATION

University of Michigan, College of Literature, Arts, and Science

Expected Graduation: May 2025

BS in Computer Science

GPA: 3.87/4.00

University of Michigan, Stephen M. Ross School of Business

Bachelor of Business Administration – Dual Degree

- **Coursework:** Data Structures and Algorithms, Discrete Math, Computer Organization, Object-Oriented Programming
- **Organizations:** Michigan Student Artificial Intelligence Lab, Michigan Data Science, Alternative Investments Club

EXPERIENCE

ESI Group

Farmington Hills, MI

AI/ML Intern

June 2024 – Present

- Designed reinforcement learning models in Python using PyTorch, Stable Baselines 3, and Gymnasium, creating custom environment to interface with ESI's vibroacoustic simulation software VA One, implementing proximal policy optimization to minimize sound pressure levels in vehicle cabins by altering noise control treatment on 3D models
- Developed a script library using Pandas, PySide2, and VA One's Python API to automate the creation of materials and noise control treatments from Excel files, export simulation data to Excel, and edit model properties based on user input

1 Plus 1 Ventures

Chicago, IL

Software Engineer Intern

Jan 2024 – June 2024

- Independently built a full-stack web application, utilizing React for front-end and Firebase for back-end, employing Google Maps API and geocoding using ArcGIS integration to provide relevant legal and regulatory information for different regions, implementing user authentication and a NoSQL database to allow users to create and organize projects
- Spearheaded the development of a project management and legal compliance platform for the natural resources sector, conducting industry research to identify potential client needs and using Figma to visualize a prototype user interface

Rocket Mortgage

Detroit, MI

Software Engineer Intern

May 2023 – Aug 2023

- Created a program in JavaScript utilizing queries and a Configuration Management Database API to automate the remediation of over 3600 duplicate relationships within the ServiceNow CMDB, reducing data inaccuracy issues by 60%
- Produced daily Microsoft Excel reports and led team meetings to monitor MID Server activity and assess configuration item discovery issues, assuming the responsibilities of a senior business analyst taking a two-week leave of absence

PROJECTS

Spotify Music Recommendation

Feb 2024

- Developed music recommendation application in Python using Numpy and Pandas, analyzing and comparing Spotify streaming data from students to identify listening patterns based on songs, artists, and genres to predict music taste
- Implemented collaborative learning techniques to predict preferences by analyzing user-item interaction patterns

Forum Post Classifier

April 2023

- Devised and trained a machine learning classifier that reads student forum posts from CSV files, processes each post by calculating a log-probability score, and predicts the topic category of each Piazza post with a 70% accuracy rate
- Programmed a templated Map class in C++ built on top of a custom Binary Search Tree library to be used as key data structures, utilizing an Iterator class to search efficiently through data within the machine learning classifier

Office Hours Queue

Mar 2023

- Designed and implemented a web application that allows students to sign up for office hours and be entered into a queue, where their meeting information will be tracked and updated as meetings are dynamically added and deleted

SKILLS

- **Languages and Frameworks:** C++, C, Python, Java, HTML/CSS/JavaScript, ReactJS, Pandas, PyTorch
- **Additional:** Freshwater fishing enthusiast, tennis and pickleball player, poker novice, top 200 in Pokemon Showdown