

# Andrew Wang

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## EDUCATION

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### 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

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### 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

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### Forum Post Classifier | Code (Available upon request)

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 | Code (Available upon request)

Mar 2023

- Designed and implemented a Web 2.0 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
- Coded a Doubly Linked List in C++ using iterators and dynamic memory to add, move, and delete nodes in the queue

## SKILLS

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- **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