Kyan Cox

kyancox.com | LinkedIn | GitHub | kyan@cs.wisc.edu | (718) 683-4214 | New York

EDUCATION

University Of Wisconsin – Madison Expected Graduation: May 2026

B.S. Computer Science, Statistics; Minor in Chinese Prof. Comm. GPA: 4.00/4.00 (Dean's List)

Relevant Coursework: Algorithms, Data Structures (Java), Object-Oriented Programming (Java), Machine Organization & Programming (C), Deep Learning & Generative Models (PyTorch), Intro to Computer Engineering

EXPERIENCE

UW-Madison | Material Sciences & Engineering Sep 2024 – Present

Undergraduate Research Assistant | Python, scikit-learn, Matplotlib, XGBoost, Pandas, NumPy, MastML

- **Led a subgroup of 3 peers** within a team of 10 peers to develop machine learning models identify key factors impacting donation campaigns for The River Food Pantry.
- Applied **Random Forest** modeling to predict donation patterns and identified optimal campaign timing and target regions through data analysis, achieving a **prediction accuracy of 84%**.

UW–Madison | Interdisciplinary Professional Programs Oct 2024 – Nov 2024

Course Assistant | Foundations of Artificial Intelligence and Machine Learning Course

- Facilitated hands-on activities and provided guidance to **industry professionals**, including **engineers and managers**, in understanding and applying Machine Learning and Artificial Intelligence concepts to their careers.

Outlier.ai May 2024 – July 2024

AI Training (Contract) | Java, Python, JavaScript / TypeScript

- Evaluated AI-generated code using **RLHF** techniques to enhance **LLM** accuracy.
- Developed and implemented test cases for **Python** and **JavaScript**, ensuring high-quality AI performance.

Rye Chamber of Commerce May 2023 – June 2023

Intern - Software | Python, Pandas, Git, Microsoft Excel

- **Simplified a multi-day process** of extracting and cleaning data from spreadsheets through **Python** and the **Pandas** library, aiding in the identification of over **200** potential customers, ultimately maximizing funds for events.

PROJECTS

Visual Snow Log | React Native, Expo, FastAPI, AWS (EC2), Docker, Supabase, PostgreSQL

- Developed a **React Native** app in collaboration with the Visual Snow Initiative for those with Visual Snow Syndrome, a condition that affects ~ 3% of the world including myself, allowing users to track their symptoms over time.
- Created a backend API with **FastAPI** to handle data processing and export functionality, utilizing **Pandas** for data manipulation, and deployed the backend on an **AWS EC2** instance, containerizing the application using **Docker**.

Cryptocurrency Investment Allocator | Python, Flask, SQLite, JavaScript, HTML/CSS, Pandas, RESTful API

- **Reduced a 1-hour investment allocation process to 5 minutes** by developing a full-stack solution using integrations with Coinbase, Gemini, and Ledger to help private investors efficiently track lucrative investments.
- Developed a **RESTful API** using **Flask** with **14 endpoints** to manage customer information in an **SQLite** database.
- Utilized **Pandas** to generate XLSX files that consolidate customer assets from multiple services.

DARS Visualizer | React, Next.js, FastAPI, AWS (EC2), Node.js Tailwind CSS, TypeScript, Chart.js

- Created a web-app for UW-Madison students using **Next.js** to visualize and organize their degree audit reports (DARS) from the university, utilizing a **FastAPI** backend containerized with **Docker** and deployed on an **AWS EC2** instance.

LLM Comparison App | React, Next.js, Tailwind CSS, MongoDB, Node.js, TypeScript, Chart.js

- Developed a full-stack web application using **Next.js**, **React**, and **TypeScript** to compare responses from OpenAI's ChatGPT, Google's Gemini, and Anthropic's Claude, utilizing their respective APIs.

LEADERSHIP

Computer Sciences Learning Center Tutor | UW-Madison CS Department Jan 2025 – Present

- **Lead over 20 one-on-one and group tutoring sessions each month**, mentoring students in core Computer Science concepts, debugging strategies, and best programming practices to improve their problem-solving skills.

Academic Chair | Sigma Alpha Epsilon Wisconsin Alpha Chapter Sep 2024 – Present

- Organized study sessions, booked study rooms, and connected members with experienced peers to support success.

SKILLS

Languages: Java, Python, JavaScript, HTML/CSS, TypeScript, SQL, R, C

Frameworks: React, Next.js, React Native, Expo, Flask, FastAPI, TailwindCSS, Express.js, Pandas, NumPy, Matplotlib, scikit-learn

Development Tools: MongoDB, PostgreSQL, SQLite, AWS, Docker, Node.js, Supabase, Vercel, Git, Postman