Kyan Cox

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EDUCATION

University of Wisconsin - Madison — Sep. 2023 - May 2027
B.S. Computer Science, Statistics — ***GPA: 4.00/4.00** (Dean's List)*

Relevant Coursework: Data Structures and Algorithms, Object Oriented Programming (Java), C and Assembly Programming, Deep Learning & Generative Models (PyTorch), Database Management Systems (SQL), Big Data Systems

EXPERIENCE

Software Engineer Intern — June 2025 - Present
Gemini — *New York, NY*
- Implemented UI improvements using **React** & **React Native** in the wire-withdrawal cash-out flow, improving fiat off-ramping on a pipeline serving **100,000+** monthly transacting users.
- Architected **Scala** REST APIs utilized by internal web dashboards that query and post to **PostgreSQL** tables, used by **40+** engineers **2×** **per on-call shift** to investigate and resolve incidents.

Peer Mentor — Jan. 2025 - May 2025
UW-Madison Computer Sciences Department — *Madison, WI*
- Led over **20** one-on-one and group tutoring sessions each month, mentoring students in core Computer Science courses, debugging strategies, and best programming practices to improve their problem-solving skills.

Undergraduate Research Assistant — Sep. 2024 - May 2025
UW–Madison Material Sciences & Engineering — *Madison, WI*
- Designed an end-to-end **Python** ML pipeline using **Pandas**, **Scikit-Learn**, & **XGBoost** that predicts individual donation amounts within $\approx$ **$45** on average, explaining over **60%** of donation behavior for a local food pantry.
- Trained a **Random Forest** classifier on **40+** engineered features, correctly flagging **71%** of future repeat donors.

Course Assistant — Oct. 2024 - Nov. 2024
UW–Madison Interdisciplinary Professional Programs — *Madison, WI*
- 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.

Intern — May 2024 - June 2024
Rye Chamber of Commerce — *Rye, NY*
- 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

Degree Progress Visualizer | *React, Next.js, FastAPI, AWS (EC2), Node.js, TypeScript*
- Developed a web-app used **180+** times per semester by UW-Madison students to visualize and organize their degree audit reports.
- Containerized a **FastAPI** backend with **Docker** to parse PDF reports, and deployed it on **AWS EC2**.

AI Image Authenticity Detector | *Python, PyTorch, Google Colab, NumPy, Matplotlib*
- Benchmarked a baseline **MLP**, a custom two-block **CNN**, and a fine-tuned **ResNet18** on the 120k-image CIFAKE dataset to detect real vs. fake images.
- Boosted test accuracy from 80.6% to **95.6%** by implementing dropout regularization and learning-rate scheduling.

Cryptocurrency Portfolio Tracker | *Python, Flask, SQLite, TypeScript, Pandas, React, Next.js*
- Automated investment tracking for private investors via a full-stack interface, drastically reducing asset allocation time and enabling real-time insights through API development and integrations.
- Built a RESTful **Flask API** with **14** endpoints managing customer data stored in **SQLite**, and generated consolidated asset reports in XLSX format using **Pandas**.

SKILLS

Languages: Java, Scala, Python, JavaScript, HTML, CSS, TypeScript, SQL, R, C
Technologies: React, Next.js, React Native, Expo, Flask, FastAPI, TailwindCSS, Express.js, Pandas, Scikit-Learn
Development Tools: MongoDB, PostgreSQL, SQLite, AWS, Docker, Node.js, Supabase, Vercel, Git, Postman