

Kaiwen Yao

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EDUCATION

Queen's University

September 2022 – April 2026

Bachelor of Computing (Honours), Major in Artificial Intelligence, Minor in Mathematics

Kingston, ON

- **Cumulative GPA:** 3.99/4.0
- **Awards:** Queen's Principals Scholarship (2022), R. Kenneth and Catherine Matheson Carty Award (2022), Gordon Canning Award in Mathematics (2023)
- **Coursework:** Data Structures, Linear & Nonlinear Data Analysis, Operating Systems, Computer Networks, R for Data Science, Artificial Intelligence and Machine Learning, Statistics & Probabilities I, II, Calculus I, II, III

TECHNICAL SKILLS

Languages: Java, Python, C, C++, Golang, HTML5, CSS, JavaScript, PHP, MATLAB, SQL, Prolog

Frameworks: ReactJS, NextJS, ExpressJS, Vite, JQuery, Django, Flask, JUnit

Libraries/API: Fetch, TailwindCSS, pandas, numpy, smtplib, openAI, tensorflow, matplotlib, transformers, keras_ocr

Developer Tools: Git, Bash, Visual Studio, Command Line Interface/Shell, Linux, Postman, AWS, Firebase, Vercel

EXPERIENCE

CanFocus Inc. canfocus.ca

April 2024 – August 2024

Fullstack Software Engineer Intern

Markham, ON

- Engineered a robust full-stack platform for an online ADHD clinic, supporting **800+** users, by utilizing Next.js, Node.js, Go, and MySQL, which enhanced user experience and operational efficiency.
- Developed new web application sections and pages, resulting in a **60% increase** in user interaction and a **150% rise** in client registrations, by implementing targeted design improvements tailored to ADHD patients.
- Optimized backend processes and implemented an interactive UI, reducing user registration processes from 8 minutes to **2 minutes**.

QMIND - Consulting Team

October 2023 – May 2024

Software Engineer

Kingston, ON

- Designed a contract assistant chatbot for a construction company using Python and Command Line Interface, processing 1GB of files in **45 seconds** through efficient data extrapolation on diverse datasets and file types.
- Integrated GPT models, TensorFlow, and Keras OCR into a streamlined pipeline, generating structured responses for user queries in **28 seconds** with **80% accuracy**.
- Innovated with self-improving LLM prompts to enhance response specificity and relevance, resulting in a significant increase in response accuracy and depth through self-querying techniques.

Queen's University School of Computing

May 2024 – Present

Undergraduate Teaching Assistant

Kingston, ON

- Evaluated assignments and lab reports for **300+ students**, delivering constructive and detailed feedback to enhance student learning outcomes.
- Led on-site tutorial sections aimed at preparing students and provided actionable advice towards students' success.
- Collaborated with professors, students, and the education team in meetings to ensure seamless course progression, consistent grading standards, and effective communication.

PROJECTS

Course Planner courseplanner.ca | *Figma, ReactJS, NodeJS, ExpressJS, Vercel, MySQL, AWS*

- Pioneered a strategic web application that improved course scheduling efficiency, reducing manual planning time from several hours to **under 3 minutes**, by automating conflict detection and schedule visualization.
- Facilitated **500+** user registrations in the first weeks, capturing 5% of the target student body within the first 12 hours post-launch, by promoting on social media and rapidly applying user feedback to enhance the user experience.
- Constructed a reliable middleware using ExpressJS and NodeJS, managing **1000+** daily transactions seamlessly with MySQL Database on AWS RDS, which ensured data integrity and quick access, by implementing robust data handling, efficient storage data types, and performance optimization techniques.

Kingston Marketplace (Hackathon Project) | *Figma, HTML, TailwindCSS, JavaScript, ReactJS, Firebase*

- Designed a responsive UI for selling second-hand items within the City of Kingston, by applying web architecture principles with Figma, React, and Tailwind.
- Integrated a Firebase back-end, incorporating authentication and real-time profile and product listing management.