Elbert Chao

elbertchao.com

EDUCATION

University of Western Ontario

Sept. 2021 – May 2025

Software Engineering (BESc) Dean's Honours List 4x (Year 4 GPA: 3.9)

London, ON

Coursework: Data Structures & Algorithms, Cloud Computing, Database Management, Web Technologies, Software Testing & Maintenance, Intro to Machine Learning, Artificial Intelligence I/II

TECHNICAL SKILLS

Languages: Python, JavaScript, Java, HTML/CSS

Frameworks: React, Next, React Native, Flask, Node, Express, FastAPI

Tools: GCP, MongoDB, TensorFlow Lite, OpenAI API, Prompt Engineering, Nginx, PM2, Jira, Confluence

Experience

PM Accelerator §

Jun. 2024 - Present

AI Engineer Intern (Next, Python, FastAPI, OpenAI API, MongoDB)

Remote (Boston, MA)

- Contributing to the development of full-stack GenAI products using React and Python, integrating real-time interactions with large language models.
- Collaborating with a global team of product managers and designers to turn user pain points into full-stack MVP features under agile workflows.
- Participating in agile sprints and regular team syncs to deliver iterative improvements on AI product architecture and usability.
- Exploring GenAI frameworks, vector databases, and LLM integration patterns to enhance product capabilities and responsiveness.

Free Appropriate Sustainability Technology – FAST §

Nov. 2024 - Apr. 2025

Full-Stack Developer (Next, Python, Flask, Nginx, PM2)

London, ON

- Developed a full-stack solution with a Next frontend and Flask backend to deliver ML-based insights into strawberry health, resulting in a 90% increase in crop monitoring effectiveness.
- Enhanced AI model performance by conducting real-world tests, systematically debugging edge cases and refining feature inputs, achieving classification speeds under 500ms.
- Maintained server uptime across a 2-month period with fewer than 3 total downtime incidents using Nginx and PM2 for load balancing and process management.
- Configured and secured a production environment for a campus-deployed web service, enabling 24/7 availability throughout the term with minimal downtime or configuration drift.

Projects

FormFixer.AI 6

Sept. 2024 – Apr. 2025

Team Lead (React Native, Express, TensorFlow Lite, MongoDB)

London, ON

- Launched a real-time form correction app aimed at novice gym users, preventing injury-causing form breakdowns across 2 common exercises by analyzing joint angles and body posture live.
- Optimized a TensorFlow Lite model to improve pose estimation accuracy, reducing joint misclassifications by 80% from 1 in 5 frames to fewer than 1 in 20 during video analysis.
- Managed a team of 4 developers and streamlined sprint workflows using Jira and Confluence, reducing average task delivery time by 2-3 days per sprint.

Competitions & Achievements

Reverb - HackAI 6

Jun. 2025

Backend Developer (Python, FastAPI, OpenAI API, Prompt Engineering)

Toronto, ON

- Engineered the Python backend for an AI tool that auto-generates social posts from videos, reducing repurposing time by 70%.
- Integrated OpenAI API and crafted custom prompts that outperformed ChatGPT in 500+ blind comparisons with 40
- Collaborated with a team of 4 to deliver a high-impact project under a 24-hour deadline, resulting in a working solution with real-time AI integration.