

Luchiano (Qi) Wang

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EDUCATION

McMaster University

Hamilton, ON

Master of Engineering in Systems & Technology (Automation and Smart Systems); GPA: 3.75/4.0 Aug 2024 – Present

Soochow University

Suzhou, China

Bachelor of Engineering; GPA: 3.7/4.0

Sep 2020 – Jul 2024

TECHNICAL SKILLS

Program Language: Python, Java, C++, JavaScript, TypeScript, SQL

Tools & Libraries: PyQt, Flask, Node.js, Express, React, Redis, Plotly, Dash, PyTorch, TensorFlow, OpenCV

Developer Tools: Git, Docker, Android Studio, Jira, Atlassian, Figma

Database: MySQL, PostgreSQL, MongoDB

EXPERIENCE

Software Engineer, Co-op

May 2025 – May 2026

EECOMOBILITY

Hamilton, ON

- **PyQt Desktop Application:** Developed a **PyQt** desktop application for battery data analysis, including new feature development, bug fixes, and **UI/UX design**; architected a reusable **Matplotlib** plotting module following an **MVC** pattern for visualization of 50,000+ data points across line plots and clustering.
- **Full-Stack Web Dashboard:** Built a full-stack interactive dashboard using **Python Dash** and **Plotly**, implementing 20+ backend callbacks to handle complex interdependent logic for dynamic **SQL** data retrieval and a configurable frontend supporting multiple visualization modes and export formats.
- **Backend API Development:** Designed and implemented a **RESTful API** platform using **Python** and **Flask** with a three-tier architecture (Route, Service, and Database layers), exposing 15+ endpoints to enable data access for both **PyQt** desktop and **Dash** web clients against **MySQL** databases; achieved response times under 50ms for lightweight status queries and under 150ms for **database-backed** data retrieval across 1,000+ EV battery testers.

Software Engineer Intern, AI R&D

Feb 2024 – Aug 2024

Ningbo Chunjian Electronic Technology Co., Ltd.

Ningbo, China

- **Vision Data Pipeline:** Built a **Python/OpenCV** pipeline to clean and prepare 200,000+ video frames for in-cabin detection model training, automating frame sampling, blur/duplicate filtering, and normalization.
- **Model Inference & Evaluation:** Ran **PyTorch** batch inference on a pretrained in-cabin detection model across nighttime and occlusion conditions, tuning confidence/**NMS** thresholds and analyzing false positive/negative rates to assess model robustness.

Software Engineer, Intern

Jun 2023 – Sep 2023

Xi'an FenShi Aggregation Technology Co., Ltd.

Xi'an, China

- **Database Design:** Collaborated on **PostgreSQL** schema design and wrote indexed **SQL** queries for fee calculation and payment status tracking, supporting up to 1,000 req/s at peak load while maintaining data consistency.
- **Payment Backend:** Built payment APIs using **Node.js** and **Express** for order creation and callback handling; implemented **Redis**-based locking with **PostgreSQL** transactions to prevent duplicate payments under high concurrency.

PROJECTS

Gotcha AI Reminder

- Developed a full-stack AI-powered scheduling web app using **React** and **Node.js**; integrated **DeepSeek LLM** to parse natural language input into structured events, with automated storage and email reminders via scheduled background jobs.

McMaster Mosaic Academic Planner UI/UX Upgrade

- Contributed to the redesign and enhancement of the academic planner interface as a team member, applying **HCI** principles for an improved user experience.