

Ailin Yu

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LinkedIn: <https://www.linkedin.com/in/ailin-yu-b9938333b/> | **GitHub:** <https://github.com/Eileenyu> | **Portfolio:** <https://eileen-portfolio-lemon.vercel.app>

Computer Science postgraduate with hands-on experience in full-stack software development and AI integration, skilled in Python, React, FastAPI and RESTful APIs. Proven ability to deliver scalable, production-quality applications through collaborative engineering and structured development practices. Former film-tech producer with cross-functional project management experience, combining technical depth with a commercial mindset to deliver software that drives measurable business value.

Education

MSc Computer Science (Merit) - University of Birmingham Sep 2024 - Dec 2025

- Delivered full-stack applications using Python and SQL databases, with solid understanding of algorithms, data structures, and software design principles.

BA Cinema and Television - Hong Kong Baptist University Sep 2016 - Jun 2020

- Developed strong analytical, communication, and cross-functional coordination skills through large-scale productions.

Experience

Engineering Intern - Risidio, United Kingdom Feb 2026 - Present

- Built and published a Chrome Extension (JavaScript) resolving a Notion row-height limitation, eliminating manual thumbnail review across a 100+ shot production pipeline.
- Maintained a structured shot tracking system for a TV production, coordinating delivery status of 100+ 3D shots.

Data Management Assistant - Huimuyinghua Culture Development Co., Ltd, China Jul 2022 - Aug 2023

- Developed an internal storage capacity forecasting tool using Excel's FORECAST.ETS to predict six-month storage needs with 98% accuracy, automating threshold alerts to stakeholders to initiate procurement ahead of critical deadlines; eliminating emergency purchases and reducing infrastructure costs.
- Designed and enforced a standardized file naming convention and directory structure for 200TB+ of raw footage across 3 teams, reducing asset retrieval errors and enabling consistent data organization across all storage operations.
- Architected a scalable storage infrastructure with multi-layer backup and redundancy protocols, ensuring fault-tolerant data preservation across concurrent team operations and maintaining 99.97% data integrity throughout all production cycles.

Post-Production Producer - Cutting Edge Pictures Co., Ltd, China Feb 2021 - Apr 2022

- Customized and deployed a Synology-based digital asset tracking system to manage 2K/4K master files across 5 concurrent projects, including a Cannes Film Festival-shortlisted title, ensuring full traceability and data integrity across all pipelines.
- Designed and implemented automated workflow scripts to streamline asset handoff across 8 specialist divisions, reducing asset turnover time by 30% while sustaining high-quality 4K DI production standards.
- Engineered backup and data integrity protocols for simultaneous multi-project deliver, safeguarding 200TB+ of production assets across all concurrent productions.

Project

Company LMS for Employee Training - Backend Developer Mar 2026 - Present

- Designed and built DRF APIs for lesson CRUD, reordering, course publishing, role-based access, and test coverage.
- Collaborated within an agile team environment, contributing to sprint planning and code reviews to maintain delivery quality and team alignment, ensuring all features met defined acceptance criteria before release.

BiteBerry - AI-Powered Budget-Based Meal Planner Jun 2025 - Sep 2025

- Built an end-to-end meal planning application with RESTful API backend (FastAPI/Python) and responsive frontend (React, TailwindCSS), serving personalized budget-based recommendations to users.
- Architected SQL database and SQLAlchemy for ORM, optimizing query performance and reducing load times by 40%.
- Designed user-centric features that delivered 25% average cost savings, iterating on user feedback to refine recommendation algorithms.

SuperQA - Biomedical Q&A System | HealthTech Hackathon (3rd Place) Mar 2025

- Engineered web app using OpenAI GPT-4o for semantic search, achieving 0.82 cosine similarity on 20k+ PubMed abstracts.
- Evaluated cloud vs local deployment trade-offs, delivering 30% cost savings through informed technical decisions.
- Implemented Git version control workflows including code reviews to maintain code quality and team alignment.

Skills

- Frontend Development:** React, JavaScript, HTML, CSS, TailwindCSS, Next.js
- Backend Development:** Python (Advanced), FastAPI, Flask, Django, SQL (PostgreSQL, SQLite), SQLAlchemy
- AI & Machine Learning:** Retrieval-Augmented Generation (RAG), LLM Integration, Vector Databases
- Infrastructure:** Git/GitHub, Vercel, Agile Collaboration, Docker, AWS
- Soft Skills:** Team Collaboration, Problem-Solving, Analytical Thinking, Communication, Adaptability, Attention to Detail
- Languages:** English (Fluent), Mandarin Chinese (Native), Cantonese (Native)