Cih-Lian Liao

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Summary

Master's candidate in Information Systems at Northeastern University with hands-on experience architecting full-stack applications using the MERN stack (MongoDB, Express.js, React, Node.js). Passionate about building intuitive, user-centered solutions, demonstrated through projects integrating AI-driven chatbots and interactive data visualizations. Combines a strong technical foundation with cross-functional collaboration skills to excel in agile environments and bridge communication between technical and non-technical teams. Eager to contribute this blend of technical expertise and teamwork to a Summer 2026 Software Engineering Internship and continue growing as a versatile full-stack engineer.

Education

Master of Science in Information Systems, Northeastern University

Expected Graduation Dec 2026, Seattle, WA

• Coursework: Application Modeling and Design (Java, OOP), Introduction to Python for Information Systems (Python, pandas), Application Engineering and Development (Java, GUI, JDBC, Docker), Web Design and User Experience Engineering (HTML, CSS, JavaScript, React, Vite), Data Management and Database Design (SQL, MySQL), Program Structure and Algorithms (Java), User Experience in the Era of Generative AI, Career Management for Engineers (Growth Mindset and Work Ethics)

Skills

- Programming Languages: Python, Java, JavaScript (ES6+), TypeScript,
- Front-End: HTML5, CSS3, React, Vite, Back-End: Node.js, Express.js, RESTful APIs,
- Databases: SQL, MySQL, NoSQL (MongoDB), Tools & Platforms: Git, GitHub, Vercel
- AI & UX: OpenAI API, Prompt Engineering, Generative AI for UX Design, AI-Driven User Experience Optimization,
- Languages: English (Fluent), Mandarin Chinese (Native), Korean (Fluent)

Selected Projects

Sneat Dashboard Analytics Platform: Full-Stack React Application, GitHub, Demo

- Architected full-stack analytics platform using **React**, **Vercel Functions**, and **MongoDB Atlas**, implementing **serverless APIs** and **responsive web design** for cross-platform compatibility
- Designed scalable serverless backend services with **MongoDB** Atlas, optimized for low-latency responses to support real-time data aggregation and business intelligence reporting
- Engineered a highly responsive React frontend with over 20 reusable components, enhancing user experience with features like dark mode, mobile optimization, and interactive data visualizations powered by Chart.js

Personal Portfolio Website: Interactive React App with Custom AI Chatbot, GitHub, Demo

- Architected a full-stack application using a modern **React** frontend and an **Express.js** backend, establishing a robust client-server architecture deployed on **Vercel** for global, high-performance access
- Engineered and integrated a custom **AI chatbot** ("LilyGPT") by leveraging **OpenAI's GPT-3.5 Turbo** via the **OpenRouter API**, demonstrating proficiency in prompt engineering and the application of modern AI tools to create an innovative, conversational user experience
- Designed a clean, modern, and intuitive user interface with **Tailwind CSS**, structuring the application into reusable components that effectively showcase a comprehensive professional journey
- Implemented a mobile-first, fully responsive design that ensures a seamless and accessible user experience across a wide range of devices, from mobile phones to desktops

Splash Flood Risk Management Platform: 2024 Northeastern University Hackathon (72-Hour Challenge), GitHub, Demo

- In a 3-person team, led the front-end development of a prototype from scratch in 72 hours, adopting a **mobile-first** strategy with **HTML5**, **CSS3**, and **JavaScript** (**ES6+**) to enhance the user experience
- Engineered the NWS API integration using async/await to parse GeoJSON data, providing a standardized data source that enabled parallel team development
- Optimized map performance with Lazy Loading and Debouncing, ensuring the success of our final team demonstration
- Developed the core **Leaflet.js** visualization module, delivering interactive maps with custom markers and NWS alert overlays in close collaboration with teammates

FunzyMart: React E-Commerce Website, GitHub, Demo

- Developed a modern, single-page e-commerce application with **React**, **Vite**, **JavaScript**, **HTML/CSS**, focusing on a seamless and interactive user shopping journey from product discovery to cart management
- Architected a modular system with reusable components and centralized state via **Context API**, enabling complex features like real-time filtering and instant cart updates without page reloads
- Implemented client-side routing with **React Router** to create a fluid navigation experience, significantly enhancing user engagement and reducing perceived latency

Experience -

Translator, Interpreter and Project Coordinator

2019 - 2023 Taiwan

- Delivered professional Korean-Chinese interpretation for business meetings and international events
- · Coordinated cross-cultural teams and facilitated effective communication under high-pressure environments
- Managed operations of a translation talent platform, collaborating with engineers to improve usability and workflows
- Cultivated strong problem-solving and teamwork skills, now applied to agile development environments to facilitate clear communication between technical and non-technical stakeholders and deliver user-centric products