

Xinya (Sia) Liu

📍 Brisbane 📞 0438407598 ✉ xinya.liu.au@gmail.com 👤 [personal portfolio](#) 🐙 [github](#)

Education

Federation University Australia

Master of Technology- Software Engineering (GPA: 6.7/ 7.0)

June 2024

Brisbane

- **Award:** Dean's Commendation, Excellence Awards (2022& 2023 &2024)

Experience

Full-Stack Developer | 🏠 Real Estate Listing Platform

Oct 2024 - Jan 2025

- Developed a real estate platform using **Python**, **Django**, and **React** that managed 500+ property listings with 15+ search parameters, processing 2,000+ daily search queries with 300ms average response time.
- Designed **PostgreSQL** database with custom indexing and partitioning strategies that reduced query times by 35%, handling 1000+ test records while maintaining sub-second response times under simulated high-load scenarios.
- Built interactive frontend with **React**, **Redux**, **React Router**, and **styled-components**, creating 8 reusable UI components that reduced codebase by 30% and delivered search results in under 500ms without page reloads.
- Implemented secure authentication using **Django**'s built-in framework with session management across 3 device types, and customized admin interface with bulk editing and role-based dashboards that reduced administrative workload by 40%.
- Deployed application using cloud infrastructure (**AWS EC2/DigitalOcean**, **RDS**, **S3**, **CloudFront CDN**) with **Nginx** and **Gunicorn**, reducing image load times by 65% and maintaining 99.9% uptime during testing with 500+ concurrent connections.

Junior Software Developer | EssilorLuxottica, China Manufacturing Facility

Apr 2016 – Jun 2018

- Created an integrated cost variance analysis platform that identified \$1.8M in annual cost-saving opportunities through **MongoDB** schema architecture for eyewear production cost tracking.
- Implemented **compound indexing and time-based data partitioning** that supported queries across 200+ daily production batches while reducing report generation time by 60%.
- Developed background processing services using **Node.js**, **Agenda.js**, and **Bull queue** that transformed manual variance reporting into an automated system, reducing anomaly detection time from 5 days to 48 hours and identifying \$1.2M in cost-saving opportunities.
- Implemented a security architecture combining **JWT authentication** with **Express middleware** for role-based permissions, protecting cost data while maintaining API performance.
- Created an integration framework between factory systems using **Node.js** ETL processes, reducing data synchronization errors by 78% and eliminating duplicate data entry.

Projects

Full-Stack Developer | 🛒 E-Commerce Platform

Jul 2024 - Oct 2024

- Developed Beauty Shop, a full-stack eCommerce platform using **MERN stack (MongoDB, Express, React, Node.js)** and **Redux Toolkit**, achieving a 25% increase in user retention and sales.
- Architected a responsive frontend with **React** functional components and **Bootstrap**, implementing custom hooks for state management across 30+ UI components and ensuring optimal display across multiple device sizes.
- Enhanced performance through lazy loading and code splitting with **React Suspense** (62% bundle size reduction) and **New Relic** monitoring (43% improvement in API response time).
- Integrated secure payment processing via **PayPal API** with 99.8% transaction completion rate, increasing conversion rates by 20%.
- Built robust backend with **Node.js**, **Express**, and **Mongoose**, secured with **JWT** authentication, and established **CI/CD** automation using **GitHub Actions**.
- Developed a comprehensive admin dashboard for product, user, and order management, reducing administrative workload by 40%.

Technical Skills

Languages & Core: Java, Python, JavaScript, TypeScript, HTML/CSS, C, SQL, Go, Kotlin, Git

Frontend: React, Next.js, Redux, MUI, Tailwind CSS, JQuery, Vue.js

Backend: SpringBoot, Django, ASP.NET, Node.js, Express, JWT, OAuth2, GraphQL, Message Queue

DevOps & Database: Docker, AWS (S3, Lambda, EC2), CI/CD, Nginx, MySQL, PostgreSQL, MongoDB, Redis