

Sherman Liu

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Python backend developer with 7+ years of software engineering experience building web applications, REST APIs, and microservices. Strong experience with Python, Flask, MySQL, MongoDB, Redis, RabbitMQ, and CI/CD. Experienced in building maintainable backend services, improving legacy systems, troubleshooting production issues, and working with distributed systems. Comfortable with React and TypeScript and able to contribute across the full stack.

Education

Diploma in Interactive Media Design Algonquin College, Canada	Sep 2024 – Aug 2026
Bachelor's Degree in Electronic Information Science and Technology Nanjing Institute of Technology, China	Sep 2012 – Jun 2016

Skills

- Backend: Python, Flask, FastAPI, Nameko, RabbitMQ, RESTful APIs, Microservices
- Databases: MySQL, Redis, MongoDB, Elasticsearch
- Frontend: HTML, CSS, React, TypeScript, Responsive Design
- Cloud & DevOps: AWS, Docker, GitHub Actions, CI/CD
- Testing & Tools: Git, Unit Testing, Integration Testing, Sentry, Kibana
- Practices: REST API Design, Agile Development, Code Review, Technical Documentation

Work Experience

<u>IPVisibility</u> Software Developer, Co-op, Ottawa	Jan 2026 – Apr 2026
• Improved a Python-based Canadian trademark ETL pipeline that processed large weekly datasets. • Introduced Prefect workflow orchestration to provide scheduling, retries, monitoring, and failure visibility. • Replaced parts of an Ansible-based workflow with Prefect workers and work pools running across multiple servers. • Fixed existing server and configuration issues that caused recurring pipeline failures, improving weekly pipeline reliability. • Fixed frontend display issues and improved responsive layouts. • Authored 10 internal documents covering system architecture, workflows, and onboarding guides.	

[Student.com](#)

Nov 2020 – Nov 2023

Backend Developer, China

- Developed and maintained Python microservices for booking, property, landlord, and commission workflows using Nameko, MySQL, Redis, RabbitMQ, MongoDB, and Elasticsearch.
- Improved service-to-service reliability by implementing timeout handling, retries, idempotency, and asynchronous processing.
- Refactored legacy services using object-oriented design and reusable components, improving maintainability and reducing duplicated logic.
- Used Kibana and Sentry to monitor applications and troubleshoot production issues.
- Created technical documentation and onboarding materials to help developers understand business logic and existing systems.

[DaDa Nexus Ltd](#)

Aug 2018 – Aug 2020

Backend Developer, China

- Developed and maintained a Python Flask materials management system used by thousands of JD retail stores.
- Refactored legacy backend code by separating request validation, business logic, and database access into clearer application layers.
- Improved API and data-processing performance using Redis caching, batch database operations, and optimized database access.
- Designed and upgraded REST APIs, including migrating existing APIs from version 1 to version 2.
- Developed highly available services using Java Spring Boot for face recognition, OCR, weather APIs, and sensitive-word detection.

[Dnion Information Technology](#)

Oct 2017 – Jun 2018

Backend Developer, China

- Independently developed a social application backend from the ground up using Python Flask and MySQL, delivering login, chat, and gifting features.

[Dahua Technology](#)

May 2016 – Sep 2017

Software Developer, China

- Developed embedded C++ software for traffic capture cameras, supporting dozens of custom features.

Recent Projects

Wild Child Ice Cream Website - www.wildchildicecream.ca

May 2026 – Aug 2026

Figma, Framer, CMS, Responsive Web Design

- Contributed to the redesign of the Wild Child Ice Cream website, taking ownership of the About Us, Foodservice, and Store Locator pages.
- Built responsive, animated, CMS-powered pages with English and French support using Framer.
- Achieved Lighthouse scores above 95 across performance, accessibility, best practices, and SEO.

Younth Company Website - www.younth.com

Jan 2026 – Apr 2026

PHP, MySQL, JavaScript, Bootstrap, SCSS, Cloudinary

- Rebuilt a company website from Figma as a production PHP and MySQL application, including an admin dashboard for managing products and site content.
- Optimized an image-heavy catalogue using Cloudinary, responsive images, lazy loading, and pagination, and deployed the site on Alibaba Cloud with HTTPS and improved security.
- Achieved Lighthouse scores above 90 for performance, accessibility, and SEO.

Portfolio Website - www.shermanliu.me

Aug 2025 – Sep 2025

Astro, React, TypeScript, Tailwind CSS, AWS

- Built a responsive technical blog and travel website with multilingual support, interactive maps, and AI-powered content summaries.
- Implemented responsive and accessible interfaces and deployed the application using AWS and CI/CD workflows.

Interests

Hiking, Reading