XIAOHONG (BILLY) XU

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■ billyxu2001@gmail.com LinkedIn GitHub Personal Portfolio

Education

University of Waterloo

M.Eng., Systems Design Engineering

Sep 2024 – Oct 2025 Waterloo. ON

 $Waterloo,\ O$

Sep 2019 – Jun 2024

Burnaby, BC

Simon Fraser University

B.Sc., Computer Science

Technical Skills

- Programming Languages: C/C++, Java, TypeScript/JavaScript, HTML/CSS, Python, SQL, Golang
- Frameworks / Backend: React/React Native, Nextjs, Node.js (Express, Hapi), Spring Boot, MyBatis, Flask, FastAPI, Django, MongoDB, MySQL, Redis, PostgreSQL
- Cloud & Tools: Git, Docker, AWS (S3, EC2, Lambda), GCP, Alibaba Cloud, Linux, Postman, OpenAPI

Professional Experience

Axon Health (MERN, PostgreSQL, JWT/RBAC, OpenAPI, AWS(IAM, ACM) Aug 2025 – Present Full-Stack Enginee Intern

Ontario, ON / Remote

- Led a 3-member engineering team to design and ship the MVP of a multi-role healthcare engagement platform, aligning technical scope with product milestones through weekly CEO syncs.
- Architected full-stack system (Express.js + React + PostgreSQL + MongoDB) with modular APIs, JWT/RBAC auth, and optimized queries, improving backend performance and release velocity.
- Built code-first OpenAPI workflow (Swagger) and shared validation middleware, reducing API integration bugs by ~40% and accelerating frontend-backend handoffs.
- Deployed and automated AWS production infrastructure EC2 + NGINX + PM2 with ACM-secured SSL, S3 for static assets, and IAM-based access control improving deployment stability and reducing manual setup time.

Batchship Inc. (MERN Stack, Postman, Redux, AWS, CircleCI, REST)

Feb 2024 - Nov 2024

Full-Stack Engineer Intern

Santa Fe Springs, CA, USA / Remote

- Integrated multi-carrier shipping APIs (UPS, USPS, FedEx, Amazon) for 100+ business clients, expanding delivery coverage and reducing failed shipments.
- Developed core logistics features batch order uploads, rate calculation, online payments system (Stripe API), and order synchronization with platforms Shipstation and TikTok,— cutting manual fulfillment time by 60%.
- Authored external API documentation and provided technical support for partner integrations, enabling third-party businesses to onboard shipping services and resolve API issues efficiently.

HackHub (MERN, AWS (S3, EC2), Vercel, Docker, CI/CD, Cypress)

Aug 2023 - Jan 2024

Software Engineer Co-op

Vancouver, BC

- Developed and launched responsive web platforms for HackHub's robotics education and global hackathon programs, enabling seamless registration and event resource access for participants.
- Enhanced full-stack hackathon competition system supporting 500+ contestants and judges across dual-location events.

Freelance & Projects

Beyond Pain Clinic (Next.js, AWS Lambda/EventBridge, Google Cloud)

Jul 2025 - Oct 2025

Product Owner (Freelance)

Kitchener, ON

- Rebuilt and deployed the clinic website on Next.js + Vercel, reducing annual hosting costs by 60% and improving page speed, flexibility, and SEO performance through optimized metadata, structured data, and Core Web Vitals tuning.
- eveloped a serverless booking and reminder system using AWS Lambda + EventBridge + CloudWatch with Google Calendar/Gmail APIs, automating confirmations and 24-hour reminders for clients.

Sonwly App (MERN, React Native, Spring Boot/MyBatis, Redis)

Sep 2024 - May 2025

Full-Stack Developer

Vancouver, BC

- Designed, developed, and launched a cross-platform app (WeChat Mini-App + React Native) providing ski resort data,
 group chats, social features, and merchant dashboards for 4,000+ active users in BC and California.
- Built and deployed a Spring Boot/MyBatis backend secured with JWT/OAuth, integrated MySQL and Redis for caching, and implemented FCM push notifications for real-time order and message updates.
- Automated ski-condition data collection from 10+ resorts using Selenium & BeautifulSoup on AWS EC2, ensuring real-time snow updates and improving data accuracy for the e-commerce module.