

Yan Xue

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EDUCATION

University of Waterloo <i>BASc in Computer Engineering, Honours, Co-op — GPA 3.9</i>	Sep 2024 - Ongoing Waterloo, ON
• Engineering Entrance Scholarship (top 2.4%); President's Scholarship of Distinction; In excellent standing	

EXPERIENCE

Software Engineer Intern <i>Photon Framework (Backed by YC MiraclePlus 25F, Z Fellows)</i>	Dec 2025 – Present San Francisco, CA
• Architected BuildSpace, an open-source CI/CD framework adopted by 100% of company services to automate versioning and multi-registry deployments (Crates.io/NPM) via semantic commit analysis	
Software Engineer Intern <i>BitGo - Developer Experience Team</i>	Sep 2025 – Dec 2025 Palo Alto, CA
• Built a Rust-based linter using Tree-sitter and GraphQL to enforce API spec quality on 3,200+ operations for ~ 25 weekly PRs, flagging bad specs instantly and saving 20+ hours of weekly debugging	
Software Engineer Intern <i>HongMall Canada</i>	Jan 2025 – Apr 2025 Markham, ON
• Developed Rasa chatbot trained on 1.48M+ historical queries, achieving 95%+ intent detection for 1M+ users	
• Engineered warehouse robot control dashboard with Python , React , and Flask managing 50K+ inventory items	
• Optimized checkout flow frontend rendering in Angular and TypeScript , reducing page load latency by 34%	
Software Engineer Intern <i>Skynet Security System Ltd.</i>	May 2024 – Aug 2024 Vancouver, BC
• Created an invoice system with Python and Tkinter , automating creation for 100+ invoices annually	
• Engineered Python pipeline consolidating customer data, deduplicating 2K+ records with 98% accuracy	
• Developed the company's website using React and TypeScript , contributing to 60+ new clients in 2024	

PROJECTS

Git-semantic search <i>Rust, Git, BGE Embeddings, Vector Search</i>
• Built natural language git logs search reaching 850+ users , searching 10K+ commits in < 100ms
• Implemented BERT tokenization with cosine similarity, reducing commit discovery from 20+ min to < 1s
• Engineered binary vector storage achieving 3KB/Commit with zero API dependencies
Flux <i>TypeScript, React, TailwindCSS, PostgreSQL, WebSockets</i>
• Architected a bi-directional WebSocket bridge that tunnels local LLM runtimes to iMessage, enabling 6,000+ users to deploy production agents in < 5s , achieving #1 Product of the Day on Product Hunt
• Developed the type-safe SDK using Zod for runtime schema validation, abstracting complex native iMessage protocols such as tapbacks, multi-bubble responses, and phone-number auth into a simple TypeScript API
Marillac Place <i>TypeScript, React, GraphQL, PostgreSQL, Docker</i>
• Developed a full-stack task management platform for Marillac Place NPO serving 28 homeless women
• Engineered a GraphQL API with Prisma and PostgreSQL to manage resident records and automated task tracking

TECHNICAL SKILLS

Languages: Rust, Python, TypeScript, JavaScript, C++, C, Java, SQL, GraphQL, Go, Assembly, HTML/CSS

Development: Git, GitHub Actions, Docker, Kubernetes, PostgreSQL, AWS CodeArtifact

Frameworks: React, Express, Next.js, Vite, Angular, Flask