

Jerry Xing

Backend Software Engineer with hands-on experience across project, product, and platform-oriented teams. Skilled in Java, Python, and Go, focusing on API development, building backend services, and distributed systems architectures.

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Education

University of Waterloo, BSc. in Computer Engineering Honours, Co-op

2024/04

Skills:

Languages	API Architectures	Tools	Deploy / Cloud
Java (Spring)	REST	Redis	Docker
Python (FastAPI)	gRPC	Elasticsearch	Kubernetes
Go		RabbitMQ	GitHub Actions
SQL			GCP

Experience

Brock Solutions

Vancouver, BC

Software Developer

2024/07 - 2024/11

- Re-architected statistics service to an event-based model, as opposed to direct-polling from PLCs via Kepware middlelayer.
- Configured custom features for baggage handling systems across Vancouver, Denver, and Houston International Airports.

Ritual.co

Toronto, ON

Software Engineering Intern - Search

2023/05 - 2023/08

- Helped migrate existing search implementation to Elasticsearch, enabling scaling from 10k to 100k+ new merchants.
- Implemented autocomplete service and respective indexing and querying via Elasticsearch Java API Client.
- Introduced merchant ratings by delivering user feedback to multiple frontend components through several flows.
- Enabled two new components by updating backend services to deliver merchant and promotional data via gRPC.

Software Engineering Intern - Orders & Payments

2022/05 - 2022/08

- Helped deliver new group ordering feature by creating additional services, pricing logic, and API endpoints.
- Revamped promo code flows and landing pages by implementing new deep link handling and endpoints.

Software Engineering Intern - Integrations

2021/05 - 2021/12

- Helped integrate numerous Point-of-Sale systems (Toast, Brink, Deliverect) to enable automated menu conversions and ordering by creating new services, APIs, webhooks, and Cron Jobs.
- Introduced order sequencing validation using Optimistic Concurrency Control across 10k+ merchants.
- Developed a service to monitor and catch problematic menu item groupings.

Government of Canada, ECCC

Gatineau, QC

Automation Tools Developer Intern

2020/09 - 2020/12

- Created an OCR and web scraping application using PyTesseract and Selenium to automate data capture from scanned permits, saving 8 hours of manual processing time per week.

DLL Group

Oakville, ON

Data Engineering Intern

2020/01 - 2020/04

- Co-led a machine learning based proof of concept for fraud, anomaly, and risk detection in transactional data using Azure ML.

Tenaris

Calgary, AB

Developer Intern - ETL Tooling

2019/05 - 2019/08

- Developed an internal ETL system that exposes database administration and design options to employees.
- Designed SQL Server database following 3.5NF (Boyce-Codd Normal Form) for over a decade of market data.
- Reduced processing time by 25% (5 minutes) per run for yearly reports via table migration and query optimizations.

Projects

- [Personal KV Store](#) | In-memory key-value store using gRPC with data persistence via snapshotting and AOF. Written in Go.
- [Shared Pixel Canvas](#) | One million shared, editable pixels. Built using Personal KV Store, Python, FastAPI, and Websockets.