

Alan Xie

alan-xie.com
alanxie29@gmail.com
github.com/alanxie29
[linkedin.com/in/alanxie29](https://www.linkedin.com/in/alanxie29)

SKILLS

Languages	Java, SQL, TypeScript/JavaScript, Python, Bash
Frameworks	Project Reactor, Spring, JUnit, Mockito, Angular 7, Node, React
Database & Tools	Apache Kafka, PostgreSQL, RabbitMQ, Prometheus, Kubernetes, Grafana, GraphQL, Firebase, Git

EXPERIENCE

Software Engineering Intern // Autonomic.ai Toronto, ON | Winter 2021

- On the DevOps team maintaining, automating, and streamlining the company's DevOps infrastructure in Kubernetes and Concourse

Software Engineering Intern // Autonomic.ai Toronto, ON | Spring 2020

- Implemented cloud-based vehicle commands using Reactor, ProtoBufs, Apache Kafka, and Spring for a fleet of 2M+ vehicles
- Raised throughput of bulk post operations in microservices by ~5x through refactoring existing service code using Project Reactor
- Wrote a Jackson service to automate and allow for custom filtering of vehicle telemetry responses, reducing payload size by ~50%
- Leveraged Prometheus and Grafana monitoring to identify bottlenecks across services, refactored code to reduce latency by ~25%
- Led the research and creation of a GraphQL POC for a large Java project to support a GraphQL endpoint for vehicle telemetry

Full Stack Developer Intern // Ford Motor Company Waterloo, ON | Fall 2019

- Designed a new JIRA Issue Template using Spring Boot, MySQL, and RabbitMQ to represent over 10,000+ critical bug reports
- Implemented fallback queuing logic using RabbitMQ to re-process and recover 1,000+ messages sent during DNS outages
- Created a file streaming process using Java and Apache Kafka to index missing file properties of 1M+ daily payload entries
- Refactored SQL queries and JavaScript pagination features to improve page load speeds by 50% on a client dashboard

Software Developer Intern // HelloGbye Toronto, ON | Winter 2019

- Built a querying tool using Angular 7 and MongoDB to annotate and store poorly parsed emails to reduce QA process time by 50%
- Created a skeleton Ionic application to support cross-platform functionality and migration of company's NLP desktop application

LEADERSHIP & COMMUNITY

Software Developer // UW Blueprint – Project Infra Waterloo, ON | Fall 2020

- Deployed an instance of HashiCorp Vault for organization-wide secret management using Docker and Google Cloud Platform
- Automated secret pulling in local Git repositories for Blueprint developers on master branch using Python and Bash scripts

Software Developer // UW Blueprint Waterloo, ON | Winter 2020

- Built a web server and portal for a non-profit education partnership aimed to automate matching of students and educators
- Participated in bi-weekly stakeholder meetings to accurately determine and update project scope and team responsibilities

PROJECTS

UnknownBot – A reactive Discord Bot implemented using Discord4J, Spring, and Netty

- Used event listeners and error handling to accurately respond to user messages and arguments with Discord4J and Project Reactor
- Implemented a reactive command flow to support asynchronous handling of external API calls and internal processes

EDUCATION

University of Waterloo | 3B B.Sc. Health Informatics with Minor in Computing | 3.9 GPA | Dean's Honours List

- Relevant Courses: Human Computer Interaction, Data Types & Structures, Introduction to Computer Science I & II

INTERESTS

- Guitar, Music Production, Board Games, Video Games, Basketball, Ultimate Frisbee