

# Tony Song

y336song@uwaterloo.ca | tony.song.dev | linkedin.com/in/y336song

## Education

---

### University of Waterloo

Bachelor of Science in Computer Science

Sept 2019 – Aug 2025 (Expected)

## Work Experience

---

### Software Developer Intern Dr.Inbox Incorporated

Nov 2023 – Apr 2024

- Architected and deployed a cloud-based solution on AWS to streamline lab result workflows, saving doctors approximately 4 hours per week in administrative tasks
- Wrote a local GUI script in Python to automate prescription refills for 500+ patients, fetching refill requests from AWS SQS daily, resulting in a 75% faster processing time
- Developed a data processing system to convert raw lab data into structured JSON objects, increasing storage efficiency by 67% through data compression and deduplication
- Optimized resource allocation across AWS regions, achieving significant cost savings and streamlined operations

### Full-Stack Developer Intern CI Technologies

May 2022 – Aug 2022

- Developed a full-stack authentication system for a Java Spring Boot application, incorporating dual login interfaces with multi-factor authentication via HttpSecurity configuration
- Enhanced search API usability by optimizing queries with Hibernate Query Language (HQL), leading to a 50% increase in adoption among internal development teams
- Revamped an end-to-end test suite for RESTful APIs using TestNG and MockMvc, automating 160+ integration tests, which increased coverage by 23% and resulted in a 98% pass rate
- Built 25+ Vue components for dashboards and forms on application core pages, following Figma mockups
- Automated database schema migrations across microservices using Liquibase scripts in YAML and SQL format

### Software Developer Intern PuraJuniper

Sept 2021 – Dec 2021

- Rebuilt a React application from JavaScript to TypeScript to maintain compliance with strict healthcare data standards, resulting in 15 new configurable features and a 38% increase in sprint completion rate
- Designed and implemented a context-free parsing algorithm to automate the conversion of clinical practice guidelines to XML, reducing processing errors by 25%
- Performed interoperability testing at HL7 Connectathon 28, ensuring compatibility across healthcare systems

### R&D Engineering Developer Intern FinVentures Canada

Jan 2021 – Apr 2021

- Developed a data pipeline using Kafka Streams for aggregating transaction data and Apache ECharts for visualizing trading activity, enabling real-time monitoring and faster anomaly detection
- Built an authentication system using Spring Security and JDBC, aligning access controls across microservices
- Resolved chronic project delays by implementing a customized Agile-Waterfall hybrid methodology tailored to the startup environment, resulting in streamlined workflows and project delivery one week ahead of schedule

## Projects

---

### Mentorship Program Association of Korean-Canadian Scientists and Engineers

- Guided 6 first-year Computer Science students in academic and career planning through tailored mentorship

## Skills

---

**Languages:** Python, Java, JavaScript, TypeScript, C, C++, Kotlin, SQL, HTML, CSS, R

**Technologies:** AWS, Docker, Spring Boot, Hibernate, Node.js, React, Vue, Kafka, MySQL, MSSQL, Liquibase