RYAN LOFTUS

LinkedIn | 905-922-8575 | Portfolio Website | rloftus@uwaterloo.ca | GitHub

SKILLS

Languages: Java, Kotlin, JavaScript, TypeScript, Python, C, C++, C#, SQL, Bash, HTML/CSS
Technologies: Git, Node.js, React, Express, Hibernate, Flask, Spring, .NET, JUnit, Spark, GPT, GraphQL, Protobuf, TailwindCSS, MySQL, PostgreSQL, SQLite, MongoDB, Redis, DynamoDB
Concepts: Relational Databases, Unit Testing, Parallel Computing, ETL, Backend, Full-Stack

EXPERIENCE

Datamuse   San Francisco, CA
Research Software Developer   January 2024 – April 2024
- Used GPT to auto-generate weekly digest emails summarizing popular new topics on civicsearch.org
- Processed geo-data and meeting transcripts in Spark to highlight locations discussed by city councils
- Wrote a script to find YouTube channels with city council meetings for US and Canadian cities, increasing the number of cities on CivicSearch by 28%
- Developed a graph algorithm to generate word puzzles used on OneLook dictionary

Faire   Waterloo, ON
Backend Engineer   May 2023 – August 2023
- Developed an internal tool to automate creation of JIRA tickets, Notion pages, and Slack channels for new projects saving 30 minutes per project using TypeScript, React, and Express
- Added backend-driven carousels and banners to distinguish eco-friendly pages from category pages using Kotlin, Hibernate, Protobuf, MySQL, and DynamoDB
- Leveraged GPT to automatically verify uses of the 'eco-friendly seller' tag, leading to a 95% reduction in falsely used 'eco-friendly seller' tags

Faire   Waterloo, ON
Android Engineer   September 2022 – December 2022
- Developed a company-wide Android pattern for fragment-to-viewmodel communication
- Built an IDE plugin to auto-generate boilerplate code for new app screens in a company hackathon
- Built a profile screen using MVVM architecture, improving feature parity between mobile and web

IGNIS Innovation   Waterloo, ON
Software Developer   January 2022 – April 2022
- Built a settings screen for an Android app that lets users view and edit settings stored as JSON
- Developed an image compression algorithm that can read from and write to user-defined formats

TD Bank Group   Toronto, ON
Developer   May 2021 – August 2021
- Added validation logic to e-transfer Java Spring APIs, reducing latency of invalid requests by 34%

EDUCATION

Bachelor of Computer Science   September 2020 – May 2025
University of Waterloo   GPA: 3.98 / 4.0

PROJECTS

Social Media Backend | *TypeScript, GraphQL, PostgreSQL, Redis*
Built a mock social media backend with user authentication, posts, comments, likes, chats, and follows

Stock Analysis Tool | *JavaScript, HTML, CSS*
Built a website that displays stock price over time, analyst trends, technical indicators, and news

Pokemon Game | *Java, SQL*
Built the battle system for a Pokemon game using MVC architecture