

RYAN LOFTUS

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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, MySQL, PostgreSQL, SQLite, MongoDB, Redis, DynamoDB

Concepts: Relational Databases, Unit Testing, Parallel Computing, ETL, Backend, Full-Stack

EXPERIENCE

Datamuse

Research Software Developer

San Francisco, CA

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

Backend Engineer

Waterloo, ON

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

Android Engineer

Waterloo, ON

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

Software Developer

Waterloo, ON

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

Developer

Toronto, ON

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