

# Ryan Prairie

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## Skills

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**Languages:** Python, Golang, TypeScript, JavaScript, Ruby, Java, HTML, CSS/SCSS, C, Kotlin

**Frameworks:** ReactJS, Flask, SvelteJS, Ruby on Rails, Spring, Koa, Express

**Technologies:** GraphQL, Docker, Linux, TCP/IP, REST API, Vim, PostgreSQL, Nginx, Caddy Server, Ansible

## Experience

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### Trexo Robotics

Mississauga, ON

Robotics Fullstack Software Developer Intern

Jan 2022–Apr 2022

- Developed backend features in Kotlin with Spring
- Improved system reliability and security by adding a reverse proxy, circuit breaker, and a firewall

### University of Windsor Computer Science Society

Windsor, ON

Head of Technology

June 2020–Ongoing

- Overhauled and containerized a Ruby on Rails, PostgreSQL, Sidekiq, and Redis app
- Built a quiz webapp using Ruby on Rails, ReactJS, JavaScript, and GraphQL to be used in a major student event
- Created a Latex math mode rendering utility with under 1 second render and API response
- Led a team of 6 to developed a student wiki built with Docusaurus, ReactJS, and Markdown

### BlackBerry

Waterloo, ON

Systems Analyst Intern

May 2021–August 2021

- Led the design of a automation tool in Golang, achieving over 5x faster deployments on major projects company wide
- Designed CI/CD Pipelines to automatically test, build, and release tools
- Coordinated with multiple teams to develop a ReactJS, TypeScript, and REST API app to be used company wide

### BlackBerry

Remote

System Software Developer Intern

Jun 2020–Aug 2020

- Developed frontend features using ReactJS and JavaScript
- Developed backend APIs using Node.js, Koa, and GraphQL
- Created a configuration translator to translate old format configurations to new format, saving 8 hours

### CIBC

Toronto, ON

Software Developer Intern

May 2019–Aug 2019

- Led the development of a service that was rolled out nationwide at all CIBC branches and is still used monthly
- Developed full stack app with SvelteJS, JavaScript, Python, Flask, and Oracle DBMS
- Built automated data uploading system to run weekly on 50 million entries, saving 10 hours weekly

## Projects

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### Buoy – Mesh VPN

- Mesh VPN made with Golang
- Architected a concurrent design to maximize throughput
- Designed a custom distributed peer discovery protocol

### imacry – Ransomware

- Proof of concept ransomware made with Golang
- 500 MiB/s fully concurrent file encryption and decryption
- Custom protocol built on websockets with random syncoption to hide heartbeat

## Education

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### University of Windsor

Windsor, ON

Honours Computer Science B.S.

Sept 2018–Expected Apr 2023

**Coursework:** Data Structures/Algorithms, Computer Networking, Network Security, Databases, Operating Systems