

# Robert Lin

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## Professional Experience

### Riot Games, Inc. | Software Engineer Intern

Los Angeles, California

GOLANG, REACTJS, DEPLOYMENT, MONITORING, DATA VISUALIZATION, D3.JS

May 2019 - Aug. 2019

- drove a cross-team effort to design an extension to the internal application specification to allow alert definitions, improving service visibility in our 3 global operators and allowing integration with new metrics vendors
- implemented and released the new specification, which was used by over 20 microservices within the first month
- built an alert visualization tool to help do root cause analysis on hundreds of alerts across microservices based on similarities (such as network topography), backed by a graph database and data from a variety of sources

### RTrade Technologies Ltd. | Software Engineer (Remote, Part-Time)

Vancouver, British Columbia

GOLANG, GRPC, DOCKER, POSTGRESQL

Sep. 2018 - Apr. 2019

- designed and built a new node orchestration and registry agent for private peer-to-peer networks for a distributed filesystem to back a new service offered by the company
- revamped our search engine service for improved results, performance, a new gRPC API, and features like OCR capabilities
- created a docker-compose framework and suite of scripts for deploying production-like environments locally and in continuous integration for integration testing, increasing the number of codebases with integration coverage by 8x

### Michael Smith Genome Sciences Centre | Bioinformatics Intern

Vancouver, British Columbia

NODEJS, POSTGRESQL, REACTJS, PYTHON, ELASTICSEARCH

Jan. 2018 - Aug. 2018

- wrote a Node.js server from scratch that became the core of all of the team's 4 DNA analysis workflows and 3 websites, reducing average data load times by over 80% and enabling new data views and reports
- set up an Elasticsearch and APM deployment for visibility into the performance and state of the team's data analysis pipelines

## Extracurricular

### UBC Launch Pad Software Engineering Club | Tech Lead

www.ubclaunchpad.com

UBC'S STUDENT-RUN SOFTWARE ENGINEERING CLUB

Jan. 2018 - Aug. 2019

- designed and led 3 projects as tech lead while providing support and mentorship to members
- organized over 12 events, 5 tech talks, and more to help cultivate a software development culture at UBC
- gave a lightning talk at the Vancouver DevOps Days conference about one of our projects for over 100 attendees

### nwPlus (formerly nwHacks) | Web Developer

2019.nwhacks.io

THE CLUB BEHIND NWHACKS, UBC LOCAL HACK DAY, CMD-F HACKATHONS

May 2018 - Sept. 2018

- implemented a React and Firestore-based overhaul of the nwHacks 2019 website and registration system with teammates, used by over 1000 users and the nwPlus team for processing hackathon applicants
- iterated on implementations of designs with our team of designers using Figma

## Open Source

### Self-Hosted Continuous Deployment Platform | Lead Developer

inertia.ubclaunchpad.com

EFFORTLESS, SELF-HOSTED CONTINUOUS DEPLOYMENT FOR SMALL TEAMS AND PROJECTS

- built an easily deployable daemon that uses Docker to handle automated project updates, builds, and deployments for use at UBC Launch Pad, allowing easy redeployments to whatever service offering the best free tiers
- developed integrations with cloud providers like AWS EC2 for instance provisioning and setup capabilities
- created a suite of containerized development tooling and automated integration test pipeline for rapid iteration

### Team Analytics Service | Personal Project

bobheadxi.dev/r/seer

GAME SCOUTING AND PERFORMANCE ANALYTICS FOR LEAGUE OF LEGENDS TEAMS

- leveraged Google BigQuery as a data warehouse for team match history and queries for trends and aggregations
- built graph visualizations in Vue.js, Vuex, and ChartJS for displaying team trends and performance insights
- implemented a job-based framework for managing data to handle rate limits of dependencies and for error resilience

### Git Repository Analysis Tool | Contributor

github.com/src-d/hercules

FAST, INSIGHTFUL, AND HIGHLY CUSTOMIZABLE GIT HISTORY ANALYSIS

- revamped 5 analysis pipeline items to allow significantly higher granularity over time for analyses
- fixed a race condition in concurrent processing and built library improvements such as a pluggable logger

## Education

### University of British Columbia

Vancouver, British Columbia

B.Sc. IN MATHEMATICS

Sept 2016 - Exp. May 2021