

# 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 and propose an extension to an internal application specification standard for alert definitions
- implemented the new specification, including integration for alert deployment with our internal service deployment framework
- built a graph-based alert visualization tool for exploring and triaging alerts based on similarities (service ownership, datacenter, network topography, etc.), backed by a graph database and data pipeline that ingests 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 Interplanetary Filesystem (IPFS) networks
- revamped our search engine service for improved results, performance, a new gRPC API, and features like OCR capabilities
- created a docker-compose framework for quickly deploying production-like environments for effective integration testing

### Michael Smith Genome Sciences Centre | Bioinformatics Intern

Vancouver, British Columbia

NODEJS, POSTGRESQL, REACTJS, PYTHON, ELASTICSEARCH

Jan. 2018 - Aug. 2018

- wrote a maintainable Node.js server from scratch that became the core of all of the team's workflows and websites
- set up an Elasticsearch and APM deployment for operational visibility into the team's pipelines and analysis jobs

## Extracurricular

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

[www.ubclaunchpad.com](http://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
- drove a new initiative, Project Hub, to give the community at UBC a space to share learnings and projects

### nwPlus (formerly nwHacks) | Web Developer

[2019.nwhacks.io](http://2019.nwhacks.io)

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

May 2018 - Sept. 2018

- implemented a React and Firestore-based overhaul of the nwHacks 2019 website and registration system with teammates
- iterated on implementations of designs with our team of designers using Figma

## Open Source

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

[inertia.ubclaunchpad.com](https://inertia.ubclaunchpad.com)

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

- built an easily deployable daemon closely integrated with Docker to handle automated project updates, builds, and deployments
- 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](https://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

### Continuous Benchmarking GitHub Action | Personal Project

[bobheadxi.dev/r/gobenchdata](https://bobheadxi.dev/r/gobenchdata)

CONTINUOUS BENCHMARKING AND BENCHMARK VISUALIZATION

- built a command-line tool and GitHub action for automatically running Go benchmarks and parsing output into JSON
- created a web application that can visualize JSON data stored in GitHub pages to chart performance improvements

### Git Repository Analysis Tool | Contributor

[github.com/src-d/hercules](https://github.com/src-d/hercules)

FAST, INSIGHTFUL, AND HIGHLY CUSTOMIZABLE GIT HISTORY ANALYSIS

- revamped all analyses to allow granular analysis interval configuration
- fixed raced conditions in concurrent processing and library improvements such as a pluggable logger

## Education

### University of British Columbia

Vancouver, British Columbia

B.SC. IN MATHEMATICS

Sept 2016 - Exp. May 2021