

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 services within the first month to deploy alerts
- 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 new Node.js server with Express that became the core 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

Jan. 2018 - Aug. 2019

UBC'S STUDENT-RUN SOFTWARE ENGINEERING CLUB

- · 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 2018 Vancouver DevOpsDays 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
- · collaborated on implementation with team of designers using design software like Figma

Open Source _

github.com/bobheadxi

Self-Hosted Continuous Deployment Platform | Lead Developer

inertia.ubclaunchpad.com

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

- led project to build an easily deployable daemon that uses Docker to handle automated project updates, builds, and deployment - used by 4 teams at UBC Launch Pad with over 7000 downloads
- developed integrations with cloud providers like AWS EC2 for beginner-friendly cloud instance provisioning 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

Education _

University of British Columbia

B.Sc. IN MATHEMATICS

Sept 2016 - Exp. May 2021

Vancouver, British Columbia