

# Rui Zhu

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## SKILLS

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|-------------------|---|
| <b>Languages</b>  | Typescript/Javascript, Java, Python, Bash, Golang, SQL              |
| <b>Frameworks</b> | Serverless, Svelte, Spring Boot, Micronaut, React/Redux, VueJS/Vuex |
| <b>Tools</b>      | aws, git, docker, maven, nix, redis                                 |

## WORK EXPERIENCE

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### Deliverr (Acquired by Flexport)

Software Engineer II

Remote  
June 2023 – Oct 2023

- Developed a launch readiness dashboard using Datadog metrics to monitor traffic to new features
- Optimized database performance by designing efficient queries using knex on MySQL tables with 15 million+ rows
- Designed and implemented new features to automate billing for over 50000 manually billed items, resulting in more accurate billing
- Diagnosed performance issues with MySQL db instances, such as race conditions, deadlocks, timeouts
- Created SQL reports using Metabase and Snowflake to monitor critical business metrics
- Wrote documentation outlining critical flows to business logic and debugging common FAQ's

Jr. Backend Developer

May 2022 – June 2023

- Managed invoicing with Chargebee, billing 100K events per week from custom billing logic
- Participated in implementation of new pricing system with rates assignment for 10k+ merchants
- Maintained ACH and credit card payments with auth using Plaid with Stripe to service 10K+ customers, collecting 100M+ in revenue
- Created datadog dashboards/alerts to monitor systems, lowering FRT from 1+ days to minutes
- Implemented lambda to send Sendgrid emails to customers when invoices were ready to be paid using Chargebee Webhooks and SQS
- Integrated IaC tools like Terraform and serverless with CircleCI, achieving easier deployments with better safeguards
- Participated in code reviews, standups, agile meetings, and other team rituals
- Helped onboard new team members onto codebase

### Capital One

Associate Software Engineer

Toronto, ON  
Jan 2021 – April 2022

- Implemented new content/components for Gatsby React site servicing 75K+ unique visitors/week
- Ran A/B tests and tracked data from 5000+ experiment interactions per day
- Wrote cypress, rtl, and enzyme tests while maintaining 100% code coverage
- Used terraform to manage security groups and IAM roles
- Integrated live API data into site, improving response time of product changes by 30 minutes
- Participated in agile development practices to effectively manage tasks
- Optimized AWS cloudfront infrastructure to increase resiliency through cloudfront origin failover

Software Engineer Intern

May 2020 – Aug 2020

- Implemented new user workflows in VueJS/Vuex SPA used by customer agents
- Created new endpoints and business logic in RESTful NodeJS APIs that were consumed by 10K+ users per day
- Performed Accessibility testing on web application, and documented/fixed issues

Software Engineer Intern

May 2019 – Aug 2019

- Upgraded Java REST API from Spring 4 to Spring Boot 2, reducing vulnerabilities by 50%
- Added performance tweaks to object pooling for encryption/decryption, decreasing response time by 20%
- Created unit and integration tests using Wiremock, H2 DB, and Mockito, getting 100% code coverage

## PROJECTS

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### kimosabe

Spring Boot, React, Postgres, Redis

Social application for finding buddies to play games with

- Used IGDB API cached in Redis and RedisSearch for searching of games
- Build using Spring Boot API and React Front end
- Orchestrated pipeline using droneCI + docker to include deployment + testing
- DB Migrations through flyway

### fserv

Golang, Postgres

File server w/ imgur style file name shortening used for self hosting images/files

- Wrote web server that served simple, light HTML website with JWT auth
- Added features for account management and private files

## EDUCATION

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### Carleton University

Bachelors Computer Science, 10.7/12 CGPA (3.8/4.0)

Ottawa, ON  
Sept 2016 – Dec 2020

- TA for data structures & algorithms class, mentoring 100+ students.