

# Rui Zhu

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## SKILLS

<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

### 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
- Built REST API to generate/retrieve csv reports and excel sheets for customer's pricing data using lambdas and presigned urls from S3
- Implemented lambda to send emails to customers when invoices were ready to be paid using Chargebee Webhooks, SQS, and Sendgrid
- 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 using Optimizely
- 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

### cyoa

Fastify, Svelte, Cloudflare, SQLite

Choose your own Adventure player + creation

- Built UI using sveltekit + pxi.js to render decision graph
- Designed editor using svelte-jsoneditor and custom logic to simplify
- Implemented storing audio and image files to show during adventure
- Social auth login with stateless sessions
- Deployed using Github Actions on Cloudflare R2 + Pages + PM2

### 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

### 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.