

Jeff Zhang

Contact

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Links

[Website](#)

Education

University of Waterloo
Bachelor of Mathematics

2017-2022
Waterloo, ON

Recurse Center

Participant, four-month self-directed retreat

Jan-Apr 2021

Remote

- Built and designed a concurrent BitTorrent client, [matey](#), with **Rust** and Tokio
- Built a toy x86-64 kernel, [playful](#), with Rust, supports: interrupts, paging, heap
- Completed [MIT 6.824 labs](#) (Map Reduce, Raft consensus, Raft KV) in **Golang**
- Studied compiler construction, implemented Lox interpreter, compiler: [rlox](#) (Rust)

Experience

Coinbase

Software Engineer Intern

May-Aug 2021

Remote

- Architected and built a concurrent work-queue-based proxy supporting multi-transport fan-out

Loo Labs

Founder, Director, Team lead

Sep 2020-Present

Waterloo, ON

- Leading a team of developers, designers, PMs, and researchers to help connect the Waterloo community by building apps, tools, and projects: [loolabs.org](#)
- [Architected](#) and built our first application — Waterpark: a centralized platform for clubs and events — with **Domain Driven Design** and **Typescript**
- Containerized backend services, setup CI/CD pipelines with **Docker** and **Heroku**

Setter

Software Engineer Intern

May-Dec 2019

San Francisco, CA

- Built self-service in **React/Redux**, automates purchase of simple jobs
- Refactored core endpoints in **Node** and Knex, reducing response times by **60%**
- Rebuilt mobile onboarding in **React Native**, increasing conversion rates by **17%**
- Optimized network calls on mobile home screen, reducing load time by **40%**
- Patched PII security vulnerabilities on backend systems with Node

Projects

[Iruka](#)

Open Source Data Structures and Algorithms

- Open-source implementations of classical data structures and algorithms
- Data structures: sequences, priority queues, search trees, hash tables
- Algorithms: search, sort, graph theory
- 600+ stars on GitHub and 8000+ views on YouTube

[Ftwitter](#)

Fullstack Twitter clone

- React Native, GraphQL, NestJS, TypeORM, and Postgres
- Features include tweets, replies, retweets, likes, hashtags, search

Skills

Languages: Golang, Rust, Haskell, Typescript

Tech: AWS, Kubernetes, Terraform, Datadog

Skills: DDD, TDD, Modular Monoliths, Microservices, Event-driven Architecture

Domains: Distributed Systems, Networking, Databases, Compilers