Jerry Deng

Education

Carleton University | Bachelor of Computer Science (Honours), 3.9/4.0 GPA

Sep 2020 - Aug 2023

Relevant Coursework: Object-Oriented Software Engineering, Programming Paradigms, Database Management Systems, Web Applications, Neural Networks, Operating Systems, Design & Analysis of Algorithms, Intelligent Web Systems

Skills

Languages: Python, Java, Javascript, Ruby, Golang, C/C++, Rust, Lua, HTML, CSS, SQL, Bash Technologies: Flask, Node.js, MongoDB, Express, Spring, React.js, Rails, NGINX, REST, GraphQL, IP, DNS Tools: Git, Agile, Postman, Wireshark, Google Cloud Platform, Docker, Kubernetes, Terraform

Experience

Shopify | *Production Engineer Intern*

Jan 2023 - Aug 2023

- Developed L7 routing infrastructure with Google Kubernetes Engine, involving updating custom NGINX middleware written in Lua, managing TLS certificates, configuring firewall rules, handling 20 million RPM
- Built observability tooling with Prometheus metrics and integrated request latency dashboards with alerts
- Implemented location based application routing in Golang, reducing latency for onboarded apps by over 40%
- Upgraded Kubernetes cluster fleet in Terraform with custom developer tools, improving infrastructure security
- Led project on reducing latency between two major services by 75% using Kubernetes load testing

Shopify | Backend Developer Intern

May 2022 - Dec 2022

- Prepared project experiment to add a new server-driven section to the store screen of the Shop app, including developing Ruby data loader transforming MySQL data into client-ready GraphQL APIs with Redis caching
- Integrated Elasticsearch templates adding a new sort option for products, ingesting 2 million records
- Added monitoring to key backend services with StatsD metrics and linked metrics to Datadog monitors
- Championed project deep-dive into improving store section performance, discovering extraneous logic and coordinated action items for the team, resulting in 10% average reduction in latency across all services

Shopify | Software Engineer Intern

May 2021 - Apr 2022

- Designed and integrated report editing buttons into a data platform website combining all data sources, creating
 React components, enabling archiving and locking reports for over 1000 developers and data scientists
- Fixed CSS styling errors, resulting in correct links and improved flex layout for superior user experience
- Developed Ruby GraphQL APIs to allow authenticated users to access restricted functionalities and datasets
- Owned pages of a major data discovery website revamp, drafting Figma designs, creating React components, transforming GraphQL queries with Typescript, resulting in improved UI navigation for over 4000 employees

Shopify | Dev Degree Intern

Sep 2020 - Apr 2021

- Selected to join Dev Degree, working part-time at Shopify alongside computer science degree
- Completed 8-month training covering the fundamentals of Ruby, Rails, React, SQL, Git, Javascript, and Scrum

Nokia | Future Tech Intern

Jul 2019 - Aug 2019

Developed production malware signatures using TCP/IP network analysis with Wireshark and bash scripting tools

Projects

Bird Classifier & | Python, Tensorflow, Flask

Classifies bird images with convolutional neural networks and web interface

Personal Website / Typescript, React.js

Personal portfolio site, deployed on Vercel