

SKILLS

Languages TypeScript • Python • C++ • C# • Java • Kotlin • OCaml • Ruby • PHP

TechnologiesNode • Express • Rails • OAuth • Kafka • SQL • GraphQL • Redis • Vue • React • .NET • Unity3D

AWS • Azure • GCP • Firebase • Expo • Datadog • Jira • Docker • Kubernetes • Amplitude • Mode

EXPERIENCE

JANE STREET | SOFTWARE ENGINEER

New York, NY | Sept '21 - Dec '21

- Built a tool for tracing latency across services and viewing aggregate results in a generated Jupyter Notebook
- Wrote a library to stream browser logging to a central location with client and server rate limiting
- Developed a Sanity Checker framework for snapshots fed into pricing models used by ADR traders

INSTAGRAM | SOFTWARE ENGINEER

Menlo Park, CA | May '21 - Aug '21

- Created an internal tool for visualizing and debugging metric queries (for likes, video views, story views etc.)
- Established an extensible schema for other metric consumers to integrate with the tool to help increase adoption
- Linked with a metrics validation framework to enable rules that improved metric integrity by 5%

JANE STREET | SOFTWARE ENGINEER

New York, NY | Sept '20 - Dec '20

- Built an application for traders to write lazy executing **SQL** queries for historical bond market data
- Setup the application to batch, dedupe and cache multiple requests for an average 2x latency improvement
- Developed a Garbage Collection mechanism to cleanup messages used in a Kafka based distributed state machine

GOOGLE | SOFTWARE DEVELOPER

Los Angeles, CA | May '20 - Aug '20

- Optimized the libraw project, leading to a 10% speedup in ingesting RAW images into Google Photos
- Configured the project to be **fuzz tested** through **OSS-Fuzz** to improve the detection of security vulnerabilities
- Built and released *libmphoto* an open source library for muxing motion photos to increase the format's adoption

FAIRE | BACKEND ENGINEER

Waterloo, ON | Sept '19 - Dec '19

- Broke up a series of tasks into Amazon SQS consumable jobs, reducing failure rates by over 80%
- Integrated with **Datadog** to track job performance and set up alerting to monitor health and stability
- Refactored the test engine SQS mock to speed up integration tests by 20% helping improve developer velocity

MICROSOFT | SOFTWARE ENGINEER

Redmond, WA | Jan '19 - April '19

- Used GitHub Webhooks to add work item linking for 10,000+ users of Azure Boards and GitHub
- Configured a redundancy job for 200,000+ teams to ensure consistency using GitHub GraphQL and Azure SQL DB

ENERGYHACKS | Founder and Director

Waterloo, ON | Sept '17 - Present

- Organized uWaterloo's first Sustainability Hackathon, connecting 200+ students with mentors and sponsors
- Ran a social marketing campaign, utilizing SEO tactics to reach over 20,000 individuals

PROJECTS

DISTANCE TOGETHER

distance-together.web.app

- A React Native app built for Android/iOS that gamifies social distancing using real time geodata
- Utilized Cloud Firestore and Cloud Functions to build out the API and Auth layers, scaling to 1,000+ users

GIF CHAT

gifchat1.herokuapp.com

- A chat room Web App that allows users to communicate solely using gifs
- Built using React and Node/Express utilizing web sockets, Bing's Search API and MongoDB

EDUCATION

UNIVERSITY OF WATERLOO | BACHELOR OF COMPUTER SCIENCE