

Jamie Pinheiro

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SKILLS

Languages TypeScript • Python • C++ • C# • Java • Kotlin • OCaml • Ruby • PHP
Technologies Node • Express • Rails • OAuth • Kafka • SQL • GraphQL • Redis • Vue • React • .NET • Unity3D
Tools 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

2017-2022

Teaching Assistant • Dean's Honor List • President's Scholarship of Distinction • Faculty of Mathematics Entrance Scholarship