

Jamie Pinheiro

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SKILLS

Languages	TypeScript • Python • C# • Java • Kotlin • OCaml • C++ • Ruby
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 '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
- Sped up server initialization times and reduced storage space by **several orders of magnitude**

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
- Developed the library using Google's open source **C++** toolkit including **Bazel**, **Abseil**, and **Googletest**

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
- Migrated to the latest **Square Connect API** to renew existing **OAuth** tokens used to link POS systems
- 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 to ensure consistency using **GitHub GraphQL** and **Azure SQL DB**
- Developed a servicing job that ran on **200,000+ teams** to ensure backwards compatibility of future integrations
- Published **Kusto Queries** to a **PowerBI Dashboard** to track feature usage, error rates, and performance

MICROSOFT | EXPLORER

Redmond, WA | May '18 - Aug '18

- Architected an extensible framework for developing "quick fixes" for common C++ errors inside **Visual Studio**
- Developed **10+ IDE Refactoring Functions** to improve developer productivity and workflows
- Implemented a **Fuzzy Search Algorithm** with compiler data for suggesting corrections to misspelled code

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