# **Jason Wang**

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## **Experience**

#### Software Engineer, Co-Creator, Seamless (seamless-cicd.com)

Jan 2023 - Present

- Created an open-source serverless CI/CD pipeline that automates the building, testing, and deployment of microservices architectures to AWS Fargate, enabling engineers to deliver software frequently and reliably
- Developed 7 containerized TypeScript apps (1 for each pipeline stage) and integrated them into a state machine (AWS Step Functions) for independent scaling of stages and parallel deployments of microservices
- Built a UI with React and Tailwind CSS so users can monitor the pipeline on a real-time WebSocket dashboard, configure webhook triggers using the GitHub API, and promote deployments from staging to production
- Wrote a Node.js/Express.js REST API for managing pipelines, with an API Gateway to handle high traffic
- Implemented a relational database schema and index selection using PostgreSQL RDS and the Prisma ORM
- Published a TypeScript npm package 🛽 for sending logs to the backend, for fast read/write to Redis Elasticache
- Automated 50+ AWS steps down to a single command, by writing CDK code to deploy 13 CloudFormation stacks
- Designed a 1-click rollback feature so users can minimize downtime by reverting to any working Docker image
- Engineered a Docker Compose integration testing feature to ensure that all microservices function as expected
- Set up email, Slack, and PagerDuty notifications to minimize incident response time, using SNS and Lambda
- Collaborated with a remote team of 3 engineers using an Agile workflow and standard Git practices
- Authored a case study 🛮 on Seamless's problem domain, architecture, challenges, and design decisions

#### Software Engineer, Open-Source Projects

Dec 2021 - Apr 2023

- JaguarBin: A tool for inspecting and debugging webhooks (WebSocket, React, PostgreSQL, MongoDB)
- In Season: A seasonal produce tracker and shopping basket (MERN, Jest, Cypress, EC2, S3, CloudFront)
- Eight Wonders: A round-the-world flight path optimizer (Ruby, Sinatra, PostgreSQL, HTML, CSS, fly.io)

#### Senior Engineer, SoCalGas

Jan 2016 - Nov 2022

- Taught staff how to automate data analysis and visualization using Python (Pandas, Jupyter, Plotly), SQLite, and Vue.js, reducing errors and saving hundreds of hours on manual engineering calculations
- Led a 10-member engineering team to deliver multiple cross-functional hydrogen demonstration projects

## Engineer II, Southern California Edison

Aug 2010 - Jan 2016

• Managed updates and wrote Excel VBA for 100+ engineering papers, achieving corporate energy efficiency goals

## Skills

#### Languages & Frameworks

JavaScript, TypeScript, Express, React, Next.js, Jest, Cypress, Ruby, Sinatra, Python, Go, SQL, HTML, CSS, Tailwind

## Other Technologies

Git, GitHub, Node.js, PostgreSQL, Prisma, MongoDB, NoSQL, Redis, RESTful APIs, Docker, Nginx, Figma

#### Cloud

AWS CDK, SDK, EC2, ECS, EFS, RDS, Step Functions, S3, CloudFront, SNS, DigitalOcean Droplets

## Education

M.S. Mechanical Engineering, University of Southern California

2014 - 2017