

Jason Wang

📧 jasonherngwang.com ✉ jasonherngwang@gmail.com 📍 Los Angeles, CA

EXPERIENCE

Software Engineer, Seamless CI/CD (seamless-cicd.com) Jan 2023 – Present

Created Seamless, an open-source, low-config CI/CD pipeline for containerized microservices on Fargate.

- Architected the CI/CD pipeline workflow, using a *Step Functions* state machine for task orchestration.
- Containerized the seven TypeScript apps which constitute the pipeline stages; configured Task Definitions for ECS, metrics for the *Auto-Scaling group*, a shared Docker volume on *EFS*, and IAM policies.
- Developed an *Express* backend with API endpoints for creating pipelines and linking microservices; used an *HTTP API Gateway* to handle requests, *Octokit* to create webhooks, and *Fargate* for horizontal scaling.
- Designed a relational data model for pipeline data; implemented with *RDS Postgres* and the *Prisma ORM*.
- Published an npm package for using *Execa* to emit ULID-timestamped logs; used the *AWS CDK* to provision an *ElastiCache Redis* cluster for log storage, and wrote middleware with *ioredis*.
- Built a *React* dashboard that uses a *WebSockets API* to stream pipeline statuses and logs in near-real-time; used *react-hook-form* with *Zod* for input validation, *GitHub OAuth* for security, *Tailwind CSS*, and *Figma*.
- Authored a case study on Seamless's problem domain, architecture, and design decisions.

Senior Engineer (Mechanical), Southern California Gas Company Jan 2016 – Nov 2022

- Led R&D testing and demonstration projects, as the hydrogen combustion and emissions expert.
- Automated data analysis and visualization using Python (*Pandas*, *Jupyter*, *Plotly*), SQL, and *Vue.js*.

Engineer II (Mechanical), Southern California Edison Aug 2010 – Dec 2015

- Managed updates to 100+ engineering papers, enabling the company to achieve energy efficiency goals.

PROJECTS

Open-Source Projects, Developed during Launch School 2021 – 2023

- *JaguarBin*: A RequestBin-like webhook inspector (*socket.io*, *PostgreSQL*, *MongoDB*, *DigitalOcean Droplet*)
- *In Season*: A seasonal produce tracker (*MERN*, *Jest*, *Cypress*, *Docker Compose*, *EC2*, *S3*, *CloudFront*)
- *Eight Wonders*: A round-the-world flight path optimizer (*Ruby*, *Sinatra*, *PostgreSQL*, *HTML/CSS*, *fly.io*)

SKILLS

Languages

JavaScript/TypeScript, Ruby, Go, SQL, HTML, CSS

Frameworks & Libraries

React/Redux, Tailwind, Cypress, Jest, Express, Zod

Cloud

AWS CDK, SDK, EC2, ECS, EFS, RDS, Step Functions, S3, CloudFront, SNS, DO Droplets, Heroku, fly.io

Other

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

EDUCATION

Full-Stack Web Development, Launch School Dec 2021 – Apr 2023

M.S. Mechanical Engineering, University of Southern California Aug 2014 – May 2017

B.S. Engineering, Harvey Mudd College Aug 2006 – May 2010

Professional Engineer License (Mechanical), State of California Apr 2014