

Jason Ng

Software Engineer

✉ jasonkng.dev in jasonkngdev ✉ jasonkngdev@gmail.com 🌐 jason-ng3 📍 New York, NY

SUMMARY

I'm a voracious learner and resilient problem solver with multiple years of experience in the JavaScript and Ruby ecosystems.

I consider myself a strong communicator, proficient in team environments and able to adapt technical language to suit my audience. **I care about making users happy, and contributing to and putting the team first.**


Lastly, I personally maintain a growth mindset and will be running the NYC marathon in the fall of 2024!

EXPERIENCE

Software Engineer, Creator, Canopy, (canopy-framework.github.io)

2023

Canopy is an open-source low-config monitoring framework, designed specifically for CDNs.

- Architected an end-to-end pipeline for streaming Amazon CloudFront CDN logs to ClickHouse and visualizing metrics on real-time dashboards in Grafana, **making it easier for developers to debug their CDN traffic**
- **Delivering a true real-time experience for users** by reducing buffering latency to a customizable amount (as low as 0 milliseconds) via a custom streaming solution engineered in AWS Lambda
- **Implemented a buffer for re-streaming and retrying failed logs** using AWS Lambda and Kinesis Data Streams, and a dead-letter queue using AWS SQS for routing failed logs to persistent storage
- Containerized and configured Canopy's backend infrastructure, including Vector, ClickHouse and Grafana for deployment on a single Docker network
- Implemented native support for monitoring parallel CloudFront distributions by automating their attachment and detachment to and from the pipeline, while tracking their meta-data with SQLite
- **Make the pipeline as easy to set up as possible**, automating 50+ AWS steps down to a single deploy command by writing AWS CDK code and deploying CloudFormation stacks
- Created a CLI to facilitate configuration, deployment, and teardown of the pipeline
- Collaborated remotely with a team of four software engineers across multiple time zones
- **Authored a technical case study** on Canopy's problem domain, architecture, challenges and design decisions (canopy-framework.github.io )

Software Engineer, Open-Source Contributor

2021 – 2023

Developed open-source web applications, some highlights projects include:

- Request Warehouse: a real-time tool for debugging and testing webhooks (Node.js, Express, React, MongoDB, PostgreSQL, WebSockets)
- Done & Done: an interactive to-do list manager (Node.js, Express, SQLite, JavaScript, HTML, CSS)
- My Cookbook: a personal recipe keeper organized by cuisine (Ruby, Sinatra, PostgreSQL, HTML, CSS)

SKILLS

Backend

Ruby, Node.js, Express, Sinatra, PostgreSQL, MongoDB, ClickHouse, WebSockets, RESTful APIs

Frontend

JavaScript, React, Jest, jQuery, HTML, CSS

Cloud

AWS: CDK, SDK, EC2, CloudFront, Kinesis Data Streams, Firehose, S3, SQS, Lambda, IAM, VPC, CloudFormation, ECS; DigitalOcean Droplets; Heroku

Other Technologies

Docker, Git, GitHub, Grafana, Linux, Bash, Nginx

EDUCATION

Bachelor of Business Administration in Accountancy, Baruch College

2007 – 2009