

William Yennie

📧 willyennie.com ✉ wryennie@gmail.com 📍 New York City Metropolitan Area

EXPERIENCE

Software Engineer; Co-creator, *Firefly* [🔗](#)

08/2022 – present

Firefly is an open-source observability framework, providing an overview of serverless function health through the use of metrics and traces.

- Prototyped and built Firefly using Node.js, OpenTelemetry and Amazon Web Services (Lambda, Metric Stream, Firehose, S3, IAM).
- Created a CLI to automatically instrument Lambda functions and set up AWS infrastructure to emit metrics from CloudWatch and published as an NPM package.
- Automated AWS infrastructure setup and teardown through the use of the AWS SDK and Terraform.
- Wrote middleware to handle context propagation in traces for asynchronous, event-based Lambda invocations.
- Built a custom OpenTelemetry collector to receive metric and trace data.
- Architected telemetry pipeline which utilized OpenTelemetry, Promscale (timeseries database), and Grafana.
- Reduced telemetry pipeline set up down to 2 steps using Docker (images, network, docker-compose).
- Designed Grafana dashboards to display serverless function telemetry data using SQL queries.
- Collaborated with a remote team of 4 engineers across 3 countries using agile workflow.
- Authored technical case study on Firefly's development and use case (read the case study here [🔗](#)).

Software Engineer, *Self Employed*

2020 – 2023

Created open-source applications using various technologies:

- Gouda Request: A database-backed web application for inspecting and debugging webhooks. Built with Node.js, Express, Handlebars, Ngrok, PostgreSQL.
- Airline Routes: Web application for tracking and visualizing flight paths from airport to airport. Built with React, Node.js, Express, MongoDB.
- Todo List: Web application with a RESTful API for creating and tracking customized todo lists. Built with Ruby, Sinatra, ERB, PostgreSQL

SKILLS

Languages

Ruby, JavaScript,
Golang, SQL, HTML,
CSS

Frameworks &

Libraries

React, Redux, Express,
jQuery, Jest, Cypress,
Sinatra, Handlebars

Cloud

AWS (Lambda, EC2,
SDK, CloudWatch, IAM,
S3), DigitalOcean

Other Technologies

Git, Docker, Linux,
PostgreSQL, MongoDB,
Terraform, REST API,
OpenTelemetry, Nginx

EDUCATION

Launch School, *Full Stack Web Development*

Multi year mastery based curriculum focused on fundamentals of programming.

Core Curriculum: OOP, Data Structures, Flow Control, REST, Network, Database

Capstone: Advanced Algorithms & Data Structures, System Design, just-in-time learning