William Yennie

Software Engineer

✦ willyennie.com ✉ wryennie@gmail.com ⚲ New York City Metropolitan Area

EXPERIENCE

Co-creator; Software Engineer, *Firefly* ⧉   October 2022 – January 2023

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 from over 15 steps 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.

SKILLS

Backend	**Frontend**	**Tooling**
Node.js, Express, Ruby, Sinatra, Golang, PostreSQL, MongoDB, RESTful APIs	JavaScript, React, Redux, HTML, CSS, jQuery	Digital Ocean, Docker, Git, GitHub, Linux, Bash, OpenTelemetry, Terraform, Nginx, AWS

EDUCATION

Launch School, *Full Stack Web Development*

Multiple years of focused study in a mastery based curriculum targeting fundamentals of web development.