

William Yennie

Software Engineer

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EXPERIENCE

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

October 2022 – December 2022

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*

2021 – 2022

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

Node.js, Express, Ruby, Sinatra, Golang, PostgreSQL, MongoDB, RESTful APIs

Frontend

JavaScript, React, Redux
HTML, CSS, jQuery

Tooling

Digital Ocean, Docker, Git, GitHub, Linux, Bash, OpenTelemetry, Terraform, Grafana, Nginx

AWS

Lambda, Cloudwatch, Kinesis, IAM, S3, API Gateway, SQS, SNS, EC2

EDUCATION

Launch School, *Software Engineering*

Mastery based education program for Software Engineers: <https://launchschool.com/employers> [🔗](#)

Suffolk County Community College, *Business Administration*