

# William Yennie

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## 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:

- HookScope: A database-backed web application for inspecting and debugging webhooks. Built with Node.js, Express, Handlebars, Ngrok, PostgreSQL.
- FlightWise: Web application for tracking and visualizing flight paths from specific airlines and airports. Built with React, Node.js, Express, MongoDB.
- TaskVault: A task tracking web app with a RESTful API. Built with Ruby, Sinatra, ERB, PostgreSQL.
- ShopSense: An e-commerce shopping cart application. Built with React, Express, Node.js and MongoDB.

## SKILLS

### Languages

Ruby, JavaScript,  
Golang, Python, 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