

William Yennie

Software Engineer

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TECHNICAL EXPERIENCE

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 setup 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 utilised 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: Application for viewing and analyzing web hooks (Node.js, Express, Handlebars, Ngrok, PostgreSQL).
 - Airline Routes: Tracks flight paths from airport to airport (React, Node.js, Express, MongoDB).
 - Todo List: Application for creating and tracking customized todo-lists (Ruby, Sinatra, ERB).

NON-TECHNICAL EXPERIENCE

Animal Care, *Animal Rescue Fund of the Hamptons*

2014 – 2022

- Coordinated with volunteers and staff to train, rehabilitate, re-home, and save the lives of over 6000 dogs and cats from high-kill shelters, natural disasters, and the illegal food trade in China.

Freelance Photographer/Video Editor, *Self Employed*

2017 – 2021

- Implemented lighting, set design, and animal posing, in-studio and on set, reducing average time of an animal's shelter stay from 40 days to 13 days.

Sanitation Supervisor, *The Beacon*

2011 – 2013

- Collaborated with front and back of house to deploy new cleaning protocols, increasing patron satisfaction by 11%.

SKILLS

Backend

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

Frontend

JavaScript, React, HTML/CSS, jQuery

Tooling

DigitalOcean, Docker, Git/GitHub, Linux, Bash, OpenTelemetry, Terraform, Grafana, Nginx

AWS Services

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*

2008 – 2010