William Yennie

Software Engineer

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TECHNICAL 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 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 – 2021
- 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.
- Photography: 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	Frontend	Tooling	AWS Services
Node.js, Express, Ruby, Sinatra, Golang, PostreSQL, MongoDB, RESTful APIs	JavaScript, React, Redux HTML, CSS, jQuery	DigitalOcean, Docker, Git, GitHub, Linux, Bash, OpenTelemetry, Terraform, Grafana, Nginx	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*