Carolina Avila Villamor

Software Engineer

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TECHNICAL EXPERIENCE

Creator; Software Engineer 🔗   12/2022 – 12/2022
Firefly
Firefly is an open-source observability framework, providing a comprehensive 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; published as an NPM package.
- Automated AWS infrastructure setup and teardown through the use of the AWS SDK and Terraform.
- Engineered middleware to handle context propagation for asynchronous, event-based Lambda invocations.
- Built a custom OpenTelemetry collector to receive metric and trace data from different sources.
- Architected telemetry pipeline which utilised OpenTelemetry, Promscale (timeseries database), and Grafana.
- Reduced telemetry pipeline set up to a two-step process 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 (try-firefly.github.io)

Software Engineer   08/2020 – 12/2022
- Created open-source applications using the following technologies: Ruby, Sinatra, JavaScript, Node.js, Express, React, Golang, MongoDB, PostgreSQL, HTML and CSS.
- Built numerous back-end, front-end, and full-stack apps including:
  - Gouda Request: Requestbin clone for viewing web hooks built with Node.js, Express, Handlebars, Ngrok, PostgreSQL.
  - Todo List: Simple todo list tracker application built with Ruby, Sinatra, ERB, PostgreSQL and Heroku.
  - ShoppingCart: a database-backed e-commerce app built with React, MongoDB, Node.js, HTML, Docker).

SKILLS

Back end	Front End	Tooling	AWS Services
Node.js, Express, Ruby, Sinatra, Go, PostgreSQL, MongoDB, RESTful APIs	JavaScript, React, jQuery, HTML/CSS	Digital Ocean, Docker, Git/Github, OpenTelemetry, Terraform, Grafana, Heroku, Nginx, Bash	Lambda, CloudWatch, Kinesis, IAM, S3, API Gateway, SQS, SNS, EC2

PROFESSIONAL EXPERIENCE

Professional Ballroom Dancer   2010 – 2020 | New York City
Self-employed

EDUCATION

Launch School   2020 – 2022
Mastery-based school for full stack software engineering: launchschool.com/employers 🔗

B.A., Fashion Design & Textiles   2019 – 2020
Queens College, City University of New York

A.A., Liberal Arts   2011 – 2013
Borough of Manhattan Community College