Sergio J. Pichardo Software Engineer

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in sergiopichardo & sergiopichardo.com

PROFILE

I'm a full-stack Software Engineer based in Starkville, Mississippi, with experience in Python, Go, TypeScript, PostgreSQL, MongoDB, React, Terraform and Amazon Web Services. I embrace new challenges, I am a teamplayer and I'm committed to continually improving personally and professionally.

EXPERIENCE

Software Engineer, Co-Creator

2022 - 2023

Armada - team-armada.github.io ≥

An open-source application to configure and deploy containerized development environments

- Developed an innovative application built with Node.js, TypeScript, PostgreSQL, Docker and Amazon Web Services (AWS) (ECS, EC2, EFS, RDS, Cognito, Lambda) to configure and deploy containerized development
- Designed and implemented a AWS cloud networking infrastructure using VPC, Security Groups, and IAM, ensuring that the application was highly available, scalable, and fault-tolerant
- Implemented a dynamic routing solution with AWS ALB to overcome the limitations of static port mapping. This enabled us to deploy multiple services on the same VM instance, saving computing resources and allowing us to easily scale our workspaces based on demand
- Developed core APIs and various backend services using the PERN stack and various AWS SDKs and command line tools
- Optimized the cloud infrastructure by refactoring it using CloudFormation outputs, Constructs, and Nested Stacks to modularize infrastructure and accelerate deployment time
- Worked collaboratively with a fully remote team of four engineers following standard agile practices on a daily basis, contributing to the successful delivery of the project
- Led the creation of technical diagrams and animations that illustrated challenges faced and solutions implemented
- Authored a comprehensive case study and documentation that offered an in-depth examination of Armada's problem domain, system design, and engineering decisions. Available at Armada Case Study &

Software Engineer, Open Source

2020 - present

Developed various open-source web-applications:

- HookScope: tool for inspecting web hooks (Node.js, Express, PostgreSQL, MongoDB, Ngrok and React)
- RemindMe: A full stack web application to store reminders (Next JS, Prisma, SQLite3, and React, AWS)

Previous Industry Experience

2013 - 2020

Prior career in hospitality, marketing, sales and business development

SKILLS

Languages and Frameworks

Node, js., JavaScript, TypeScript, Python, FastAPI, Go, PostgreSOL, HTML/CSS, Express, React, MongoDB, Git, GitHub, bash, REST APIs, WebHooks, Testing, Jest, SuperTest, Cypress.

Cloud Computing and Tools

AWS, VPC, EC2, ELB, ECS, EFS, Lambda, API Gateway, EventBridge, SOS, SNS, AppSync, AWS Amplify, CloudWatch, CloudFront, S3, ACM, GitHub Actions, Infrastructure-as-Code, CDK, CloudFormation, Terraform, Ansible, Cognito, RDS, DynamoDB, Heroku, DigitalOcean, Nginx, Docker, Route 53, S3, CloudFront, Serverless Framework

EDUCATION

Software Engineering

2020 - 2022

Launch School ∂

A comprehensive multi-year full-stack software engineering school focused on the mastery of core programming skills and fundamentals. For more information, visit https://launchschool.com/employers

Computer Science and Engineering

In Progress

Mississippi State University

Courses in Calculus, Probability, Statistics, Data Structures and Algorithms and more.