VICTOR CARVALHO

Sāo José dos Campos, Brazil (GMT -3) \diamond Vancouver, Canada (GMT -7) linkedin.com/in/vmcarvalho

SUMMARY

Senior backend engineer with 10 years of experience specialized on distributed systems and AWS infrastructure. I'm passionate about designing well-crafted systems with a strong focus on reliability, security, and clean, maintainable code. I've worked on APIs, driven automation efforts, improved system security and observability, and taken full ownership of the services I deliver.

OBJECTIVE

I'm looking for a role where I can take on challenging, rewarding engineering problems, keep growing technically, and help mentor others.

TECHNICAL SKILLS

Programming: Java, TypeScript, Python, Go, SQL, C, Ruby, Shellscript

Cloud architecture: AWS (Cfn/CDK, IAM, CloudWatch, RDS, etc), Infrastructure-as-Code, Multi-region deployment, Horizontal Scaling, Database Management Systems

Reliability Engineering: CI/CD Pipelines, Monitoring and Alerting, High availability, Operational Readiness Backend Systems: Distributed Systems and Microservices, API Design, Clean Code and Architecture, Spring Framework

Security: System Hardening, Vulnerability Assessment, IAM Policies, Network Databases: Relational Databases, DynamoDB, MongoDB, Caching strategies

Methodologies: Agile Development, Design Documentation, Security Reviews, Developer Autonomy

Languages: English (professional), Portuguese (native)

PROFESSIONAL EXPERIENCE

Amazon Web Services Software Development Engineer II

Vancouver, Canada Feb 2022 – Sep 2024

- Worked on infrastructure projects in Relational Database Service (RDS) enabling horizontal scaling at regional level maintaining 99.9% availability.
- Authored architecture design documents for security and isolation focused changes, reducing blast radius.
- Implemented infrastructure-as-code changes (TypeScript/AWS CDK) supporting new deployment model adopted by multiple service teams.
- Designed monitoring system using CloudWatch and synthetic tests that reduced cross-region discrepancies by at least 50% by using dashboards and alerts.
- Served as security focal point, reviewing 10+ system designs and operational readiness documents.

Software Development Engineer I

Jun 2019 – Jan 2022

- Built and maintained internal services for managed database version automation in RDS, including Java Spring APIs and CI/CD tooling adopted by 15 service teams.
- Automated zone bootstrapping process, reducing error-prone manual work from 30+ hours to 2-hour one-click workflow.
- Owned full project lifecycle from requirements and design design docs with high-level alternatives to monitoring and operational support for production systems.

Samsung Research Institute Software Engineer

Campinas, Brazil Apr 2017 – Mar 2019

- Developed Android enterprise mobility management features used by 3rd-party EMM solutions.
- Analyzed Android internals and extended device control capabilities through Java/C++ policies.

Junior Security Engineer

Jan 2015 – Mar 2017

- Authored security reports for product hardening efforts. Discovered 20+ critical vulnerabilities in Android, IoT and web services products through ethical hacking.
- Developed security testing tools that accelerated vulnerability research.

EDUCATION

B.Sc. Computer Science, University of São Paulo Exchange Program in Computer Engineering, University of Porto

2010-2014

2012-2013