VICTOR CARVALHO

São José dos Campos, Brazil (GMT -3) ⋄ Vancouver, Canada (GMT -7)

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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   Vancouver, Canada
Software Development Engineer II   Feb 2022 – Sep 2024

- Worked on infrastructure projects in Relational Database Service (RDS) enabling horizontal scaling at regional level maintening 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 Campinas, Brazil
Software Engineer 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 2010–2014
Exchange Program in Computer Engineering, University of Porto 2012–2013