

VICTOR CARVALHO

Vancouver, Canada (GMT -7) ◇ São Paulo, Brazil (GMT -3)

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SUMMARY

Senior software engineer with 10 years of experience, being 5 building and scaling distributed systems and cloud-native services in high-availability environments. I'm passionate about designing reliable and secure systems writing clean, maintainable code. Proven track record of owning full project lifecycles — from architecture design to deployment and operational monitoring — on systems supporting real users at scale, with expertise in infrastructure automation, database management, and observability.

OBJECTIVE

I'm looking for a senior software engineering role where I can contribute to backend development, cloud-based, or high-performance systems. I'm eager to tackle complex technical challenges, building reliable production systems, and mentoring engineering teams.

TECHNICAL SKILLS

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

Backend Systems: Distributed Systems, Microservices, API Design and Integration, Clean Code and Architecture, Spring Framework

Cloud Architecture: AWS (SQS, SNS, RDS, CloudFormation, CloudWatch, IAM, etc), Infrastructure-as-Code, Multi-region Deployment, Horizontal Scaling

Database Systems: Relational Databases (PostgreSQL, MySQL), DynamoDB, MongoDB, Database Performance Optimization, Caching Strategies

DevOps & Reliability: CI/CD Pipelines, Monitoring and Alerting, High Availability, Production System Ownership, Docker

Security: Security Hardening, IAM Policies, Networking, Secure System Design

Methodologies: Agile Development, Technical Design Documentation, Code Reviews, Cross-functional Collaboration

Languages: English (professional), Portuguese (native)

PROFESSIONAL EXPERIENCE

Amazon Web Services

Vancouver, Canada

Software Development Engineer II

Feb 2022 – Sep 2024

- Scaled distributed infrastructure for Relational Database Service (RDS) enabling horizontal scaling at regional level while maintaining 99.9% availability for production systems handling thousands of database instances.
- Designed and authored technical architecture documents for isolation and security-focused infrastructure changes, reducing blast radius and improving system reliability.
- Implemented infrastructure-as-code changes (TypeScript/AWS CDK) supporting a new deployment model adopted by multiple service teams.
- Engineered comprehensive drift detection system using CloudWatch, synthetic testing, and custom metrics that reduced cross-region data discrepancies by 50% through monitoring dashboards and alerting.
- Served as security focal point for multiple teams, conducting technical reviews of 10+ distributed system designs and operational readiness documents.

Software Development Engineer I

Jun 2019 – Jan 2022

- Developed and maintained backend services for software release automation in RDS using Java Spring, cloud services, and CI/CD tooling supporting 15+ internal service teams with high availability requirements.
- Built automated infrastructure provisioning system that eliminated 30+ hours of manual, error-prone processes into a 2-hour automated workflow including testing, improving operational efficiency and reducing human error.
- Owned complete project lifecycle including requirements gathering, system design, backend development, testing, production deployment, and ongoing operational support.

Samsung Research Institute Software Development Engineer

Campinas, Brazil
Apr 2017 – Mar 2019

- Built enterprise mobility management (EMM) features in Android framework used by 3rd-party solutions.
- Engineered Android system-level components using Java and C++, extending device management capabilities.

Junior Security Engineer

Jan 2015 – Mar 2017

- Conducted security assessments and authored technical security reports for production systems, identifying 20+ critical vulnerabilities across Android, IoT, and web service platforms.
- Developed automated security testing tools and frameworks that accelerated vulnerability research and assessment processes.

EDUCATION

B.Sc. Computer Science, University of São Paulo

2010–2014

Exchange Program in Computer Engineering, University of Porto

2012–2013