

# Rafael R.

## Architect/Lead Senior Cloud Architect/Platform Engineering (AWS, AI)

### SUMMARY

- 10+ years in IT infrastructure and AWS solutions architecture; leads a 12-person cross-functional platform team running 100+ microservices across 2 AWS regions.
- IaC expertise: Terraform + GitLab CI/CD at ~95% coverage; built an Internal Developer Platform, cutting provisioning from 1 day to under 15 minutes.
- Compliance and network segmentation experience: zero-trust VPC/Security Group/NACL architecture (KMS/TLS) as sole security engineer, delivering PCI DSS Level 1 in ~6 weeks; DPO under LGPD.
- Skilled in low-code AI workflow automation: GPT-4 + n8n in production resolving ~70% of 1,000+ daily tickets under \$100/month.
- AWS Solutions Architect Associate, PCI DSS PCIP, AI Agents Advanced.

### TECHNICAL SKILLS

|                                                  |                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Main Technical Skills</b>                     | AWS, Terraform, Kubernetes                                                                                                                                                                                                                                                                                      |
| <b>Programming Languages</b>                     | Python                                                                                                                                                                                                                                                                                                          |
| <b>AI &amp; Machine Learning</b>                 | AI, GPT, n8n                                                                                                                                                                                                                                                                                                    |
| <b>Security</b>                                  | AWS Security, AWS Security Groups, GuardDuty, IAM, Incident response, NIST, PCI DSS, Pentests                                                                                                                                                                                                                   |
| <b>Cloud Platforms, Services &amp; Computing</b> | AWS                                                                                                                                                                                                                                                                                                             |
| <b>Amazon Web Services</b>                       | AWS ALB, AWS API Gateway, AWS Aurora, AWS Cloudformation, AWS CloudTrail, AWS CloudWatch, AWS EC2, AWS ECS (Amazon Elastic Container Service), AWS Elastic Kubernetes Service, AWS EventBridge, AWS Fargate, AWS IAM, AWS KMS, AWS Lambda, AWS S3, AWS Security, AWS Security Groups, AWS SNS, AWS SQS, AWS VPC |
| <b>Azure Cloud Services</b>                      | Hyper-V                                                                                                                                                                                                                                                                                                         |
| <b>Deployment, CI/CD &amp; Administration</b>    | Ansible, ArgoCD, CI/CD, Configuration Policies, GitLab CI, GitOps, Helm, istio, Jenkins, KEDA                                                                                                                                                                                                                   |
| <b>SDK / API and Integrations</b>                | AWS API Gateway                                                                                                                                                                                                                                                                                                 |
| <b>Scripting and Command Line Interfaces</b>     | Bash                                                                                                                                                                                                                                                                                                            |
| <b>Logging and Monitoring</b>                    | Datadog, Grafana, Prometheus                                                                                                                                                                                                                                                                                    |
|                                                  | Docker, Kubernetes, Terraform, VmWare                                                                                                                                                                                                                                                                           |

|                                                     |                                                           |
|-----------------------------------------------------|-----------------------------------------------------------|
| <b>Virtualization, Containers and Orchestration</b> |                                                           |
| <b>Version Control</b>                              | Github Actions, GitLab                                    |
| <b>Methodologies, Paradigms and Patterns</b>        | IaC, ITIL, Kanban, Scrum                                  |
| <b>QA, Test Automation, Security</b>                | KMS, WAF                                                  |
| <b>Project Management &amp; Administration</b>      | SLAs                                                      |
| <b>Mail / Network Protocols / Data transfer</b>     | TLS, VPN                                                  |
| <b>Web/App Servers, Middleware</b>                  | Windows Server                                            |
| <b>Other Technical Skills</b>                       | APM, Argo, LGPD, NACLs, NLB, PCI DSS Compliance, RDS, SRE |

## WORK EXPERIENCE

### Senior Platform Engineer & Team Lead, Q2 Ingressos (Platform Engineering)

**Duration:** Aug. 2023 - Present

**Summary:** Leading platform engineering for one of Brazil's largest ticketing platforms, managing 100+ microservices across 2 AWS regions. The project focuses on designing scalable, resilient, and secure cloud architectures and building an Internal Developer Platform to accelerate service provisioning.

#### Responsibilities:

- Lead a 12-person cross-functional team (DevOps, DBA, QA, Security, Architecture) owning all infrastructure for one of Brazil's largest ticketing platforms - 100+ microservices across 2 AWS regions.
- Designed and maintained AWS reference architecture diagrams (C4 context/container level) for the entire microservices landscape, enabling team onboarding and architectural decision-making across 12 engineers.
- Applied AWS Well-Architected Framework reviews across reliability, security, cost optimization, and operational excellence pillars - driving structured improvement cycles for critical services.
- Evaluated and documented architecture trade-offs for ECS Fargate vs. EKS migration, active-passive vs. active-active multi-region, and synchronous vs. event-driven patterns - aligning technical decisions with business risk and cost constraints.
- Built an Internal Developer Platform (IDP) with Terraform and GitLab CI/CD, cutting service provisioning from 1 day to under 15 minutes; supports 80+ production services.
- Implemented GitOps workflow with automated drift detection and policy enforcement, reaching ~95% IaC coverage.
- Managed AWS budget through 10x service growth, keeping spend increase to ~35% through systematic FinOps practices.
- Architected ECS Fargate to EKS migration strategy with Karpenter autoscaling and Spot Instances, projecting 30% cost reduction and 40% improved resource efficiency.



- Deployed Datadog with APM and distributed tracing across 100+ services, reducing MTTR from ~4h to ~1h.
- Integrated GPT-4 + n8n support automation resolving ~70% of 1,000+ daily tickets at under \$100/month.
- Led migration of monolithic components to event-driven microservices (Docker, ECS), enabling 4-5 daily deployments.
- Serve as company DPO: structured LGPD data protection policies, implemented PII masking in logs via Datadog Sensitive Data Scanner.

**Technologies:** AWS (ECS Fargate, EKS, Lambda, RDS Aurora, S3, VPC, IAM, KMS, CloudTrail, Config, GuardDuty, WAF, EventBridge, SQS, SNS), Terraform, GitLab CI/CD, GitOps, Karpenter, Spot Instances, Datadog (APM, tracing), Docker, GPT-4, n8n.

## **AWS Security Architect/DevOps Engineer, Hyperlocal (Hyperlocal Multi-Region AWS Infrastructure and Security)**

**Duration:** Oct. 2021 - Aug. 2024

**Summary:** Sole infrastructure and security engineer supporting 6 business units with 100+ services across a multi-region AWS environment. The project involved architecture design, security program development, and PCI DSS Level 1 certification.

### **Responsibilities:**

- Sole infrastructure and security engineer supporting 6 business units with 100+ services across a multi-region AWS environment.
- Produced architecture diagrams (network topology, data flow, and security boundary diagrams) for all 6 business units, serving as primary documentation for PCI DSS audit evidence.
- Conducted AWS Well-Architected Framework reviews focused on Security and Reliability pillars, identifying and remediating critical gaps ahead of PCI DSS Level 1 certification.
- Led PCI DSS Level 1 certification in ~6 weeks - designed full network segmentation (VPCs, security groups) and implemented end-to-end encryption (KMS, TLS).
- Built security program from scratch: AWS WAF, CloudTrail, Config, GuardDuty; ran 2 annual pentests with 100% critical vulnerability remediation.
- Achieved ~90% IaC coverage with Terraform across 6 business units using a reusable module library.
- Reduced monthly AWS spend from R\$400K to R\$290K (~27%, ~R\$1.3M/year) through Reserved Instances, rightsizing, and cleanup automation.
- Maintained SLAs across all 6 business units while establishing incident response procedures from the ground up.

**Technologies:** AWS (VPC, Security Groups, KMS, TLS, WAF, CloudTrail, Config, GuardDuty), Terraform, PCI DSS compliance tools.

## **Security Analyst/PCI-ISA, Quero 2 Pay (Quero 2 Pay PCI DSS Compliance and Security Architecture)**

**Duration:** Mar. 2021 - Oct. 2021

**Summary:** Supported the company's PCI DSS certification process as PCI Internal Security Assessor. Designed AWS security architecture and conducted security assessments to improve compliance and security posture.



### **Responsibilities:**

- Acted as PCI Internal Security Assessor (ISA), mapping controls, identifying compliance gaps, and directly supporting the company's PCI DSS certification process.
- Designed AWS security architecture: network segmentation with VPCs, security groups and NACLs, encryption in transit and at rest (KMS, TLS).
- Conducted security assessments identifying 20+ vulnerabilities with risk-prioritized remediation plans.
- Worked closely with development teams to embed security practices into the application lifecycle.

**Technologies:** AWS (VPC, Security Groups, NACLs, KMS, TLS), PCI DSS compliance.

### **IT Manager, Di Fiorena Ind. e Com. Ltda (Operations Management)**

**Duration:** May 2010 - Apr. 2021

**Summary:** Managed all IT operations including physical infrastructure, server virtualization, backup routines, and end-user support for over 11 years, ensuring business continuity and operational efficiency.

### **Responsibilities:**

- Managed all IT operations for 11 years – from physical infrastructure to end-user support.
- Administered full on-premise infrastructure: physical servers, structured cabling, switches, and network assets.
- Implemented server virtualization, increasing availability and reducing reliance on dedicated hardware.
- Designed and managed backup routines ensuring business continuity and corporate data protection.
- Managed IT assets, licensing, and vendor relationships, keeping operations within budget and with minimal downtime.

**Technologies:** VMware, Hyper-V, Windows Server, structured cabling, backup management.

## **EDUCATION**

- **Bachelor of Computer Science**  
Universidade de Franca, Franca, SP

## **CERTIFICATION**

- **AWS Solutions Architect Associate**  
2023 - 2026
- **PCI DSS PCIP**  
2022
- **Datadog SRE**  
2023
- **GitOps with ArgoCD**  
2023
- **AWS FinOps**  
2023



- **GitLab CI/CD Pipelines**  
2024
- **AI Agents Advanced**  
2025
- **Uncomplicating EKS**  
2025

