Roberto Devesa Fernández

Platform Engineer

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Up-to-date version of CV is available at
https://Roberdvs.github.io/cv-repository

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Terraform ●●●●● Kubernetes ●●●●● AWS ●●●●● DevOps ●●●●● GitOps ●●●●●

Platform Engineer with a background in System Administration.

Over the past years, I have been busy designing, implementing and evolving a Kubernetes-based Internal Developer Platform, acting as technical lead for a small team of engineers and championing DevSecOps & SRE practices; fostering a culture of continuous improvement and full-service ownership.

I'm used to creating reliable and scalable systems, streamlining processes, dealing with migrations from legacy systems to modern and simpler alternatives, optimizing infrastructure, and addressing cross-cutting concerns, primarily leveraging cloud services and open-source tooling while following Infrastructure as Code and GitOps approaches.

Familiar with being part of an on-call rotation, supporting mission-critical services and infrastructure, and following incident response best practices like writing blameless postmortems.

Professional Experience

Feb 2022 – Present. Remote

Senior Platform Engineer

Continue leading the evolution and roadmap of the Internal Developer Platform, nurturing a team around it as a tech lead while mentoring colleagues and teams on DevOps, SRE, and full-service ownership practices.

I'm currently working on optimizing cloud costs by moving the vast majority of workloads to ARM architecture.

Goals: • Optimized infrastructure utilization by migrating from Kubernetes Cluster Autoscaler to Karpenter, reducing costs by 40%. • Enhanced API performance and reduced infrastructure costs by collaborating with application teams to implement caching policies in our CDN. • Spearheaded the migration from PagerDuty to BetterUptime for incident response. • Automated Terraform code quality and security checks using GitHub Actions. • Deployed an internal JupyterHub platform to provide Jupyter Notebooks for Data Engineers and Data Scientists.

DevOps Terraform Kubernetes AWS EKS

Feb 2021 - Feb 2022. Hybrid

Platform Engineer

As the company grew to +100 engineers, established the formation of the Platform Engineering Team as the next step in our DevOps journey; a team responsible for promoting DevOps practices at scale and addressing cross-cutting concerns by providing application teams with an Internal Developer Platform that they can leverage to develop, deploy and operate their apps in a self-service fashion.

• Led the creation and evolution of the Kubernetes-based Internal Developer Platform, leveraging AWS EKS, IaC and open source tooling like Rancher, ArgoCD, Harbor, Prometheus, Grafana, ElasticSearch... while integrating Single Sign-on + RBAC. • Migrated workloads from AWS ECS to AWS EKS, using Helm charts and GitOps practices. • Architected and implemented a cloud-agnostic solution for running Big Data Spark Jobs on our Kubernetes platform, leveraging the spark-operator, Argo Workflows, and autoscaling capabilities, migrating from a

previous AWS EMR setup and reducing vendor lock-in. • Simplified the company's AWS user management by leveraging AWS SSO and integrating Google Workspace as Identity Provider. • Improved security posture by integrating AWS WAF. • Drove infrastructure cost savings through increased use of spot instances. • Developed opinionated Terraform modules with embedded best practices. • Led the migration of legacy systems to modern, simpler & more maintainable alternatives, like moving from an in-house VPN solution to Tailscale.

DevOps Terraform Kubernetes AWS EKS

Nov 2016 - Feb 2021

DevOps Engineer

Being a small company of ~20 people I used to wear many hats without a clearly defined role and help where I could, ranging from office IT to managing cloud infrastructure and everything in between, but I always gravitated more to DevOps-related tasks from which I'd highlight:

• Migrated from Atlassian Bamboo to Jenkins for Continuous Integration; configuring pipelines as code with reusable libraries among projects. • Integrated new tools like SonarQube into the CI/CD process to improve SDLC. • Managed cloud resources with Terraform and implemented collaborative IaC workflows using Atlantis. • Worked on migrating static websites to simpler, cheaper, and more reliable hosting using S3 + CloudFront. • Containerized applications with Docker and orchestrated deployments with AWS ECS. • Improved scalability and reliability of backend services by applying SRE practices and leveraging Prometheus, Grafana, and the Elastic Stack. • Implemented auto-scaling on our backend services to automatically adjust the capacity based on demand. • Played a key role in scaling infrastructure to support high traffic during major events like Black Friday, while reducing the manual steps involved in the process of dealing with subsequent large-scale events. • Be part of an on-call rotation, resolving incidents and writing blameless post-mortems, figuring out root causes, and taking action to prevent them from happening again.

DevOps Terraform AWS

Education

Bachelor's Degree in Telecommunications Engineering at Universidad de Oviedo [2008 - 2013]

Additional Experience