# Resume

# GUILLERMO GREGORET

Role: DevOps and Infrastructure Engineer Email: guillermo@gregoret.com.ar LinkedIn: /ggregoret

# PROFILE

I am an Information Systems Engineer driven by a deep passion for technology and a strong focus on DevOps practices. My background encompasses extensive expertise in networking and systems administration, with a specialized emphasis on automating application deployments, managing cloud systems, administering databases, and operating systems. I am a naturally curious and proactive professional dedicated to continual growth within the IT sector, consistently striving to remain abreast of the latest technological advancements.

Key Technologies:

- Proficient in Infrastructure as Code (IaC) implementation, primarily utilizing Terraform.
- Experienced in leveraging AWS as a primary Cloud Platform.
- Skilled in Container Orchestration, adept with Kubernetes (EKS, GKE) and AWS ECS (Elastic Container Service).

# **EMPLOYMENT HISTORY**

# Ssr DevOps Engineer - Folder IT · Jun 2022 - Present

- AWS ECS, EC2, RDS, Route53, S3, CloudFront, ACM, SNS, SQS, Cognito, Cloudwatch, NAT, ALB, Serverless Application Model.
- Containers: Docker
- Infrastructure as Code: Terraform
- Kubernetes: Google Kubernetes Engine, Amazon Elastic Kubernetes Service, Minikube
- Skills: Terraform · Amazon Web Services (AWS) · Linux System Administration · Google Cloud Platform (GCP) · Bash

# Freelance DevOps · Jan 2021 - Jun 2022

- CI/CD Pipelines with Bitbucket and GitLab
- Infrastructure as Code with Terraform and Cloudformation to deploy resources on AWS
- Managing AWS Services such as EC2, ECS, RDS, ECR, EFS, ALB and more.
- Managing Windows Server VMs and Firewalls on Microsoft Azure.
- Skills: Terraform · Amazon Web Services (AWS) · Linux System Administration · Gitlab · AWS CloudFormation · Bash

# Network Infrastructure Manager - ASSO Network Solutions · Oct 2020 - Jun 2022

- Configuration and maintenance of network infrastructure: Mikrotik routers and switches
- Windows Servers and their roles (AD, DHCP, DNS, WSUS)

- Linux Servers
- Dell PowerEdge and HP Enterprise Servers
- Database Engines (MySQL, SQL Server)
- Web Servers (Nginx, Apache)
- VPN links (PPTP, OpenVPN)
- Skills: IT Infrastructure Management · Mikrotik · VMWare ESXi · Proxmox · Windows Server · Linux

# EXPERIENCE

# **DevOps at Palm Foundation**

Description: Palm Foundation is a blockchain company currently focused on Decentralized Autonomous Organizations (DAOs). In my role as a DevOps specialist, I am responsible for architecting the entire infrastructure using Infrastructure as Code and Kubernetes. To accomplish this, I have opted for Terraform in conjunction with AWS Elastic Kubernetes Service (EKS). The project incorporates GitOps principles with ArgoCD, utilizing the latest technologies. Notably, I have designed everything, including the Terraform code and Helm charts, to enable one-click deployment of the entire infrastructure.

<u>Technologies</u>: AWS Route53, EKS, RDS, ALB, ACM, S3, CloudFront, Cloudwatch, Elastic Stack (Elasticsearch, Logstash, Kibana), Grafana, Cloudwatch Logs, MongoDB, RabbitMQ, GitHub Actions, Kubectl, ArgoCD, Helm. <u>Duration</u>: 9 months

# DevOps EnModo - HyperMotors - USA/ARG

<u>Description</u>: At Hypermotors Corp., a US-based company specializing in spare parts and accessories for various vehicles, my role was to develop an AWS-based infrastructure using Terraform for Infrastructure as Code. I set up Git repositories, containerized the backend using Docker, and automated the deployment of both backend and frontend. The project's focus was on building a platform to enhance business scalability. It allowed for support of multiple vendors, simplified supplier onboarding, automated shipping cost calculations, and facilitated the automatic generation and updating of digital market publications. The goal was to provide a unified interface for seamless supplier and warehouse management, improving the overall customer experience.

<u>Technologies</u>: AWS ECS, EC2, RDS, Route53, S3, CloudFront, ACM, SNS, SQS, Cognito, Cloudwatch, NAT Gateway, Docker

Duration: 1 year

# DevOps on Serverless Architecture project – USA

<u>Description</u>: The project involved recreating the infrastructure of an already existing project that was not properly utilizing the architecture of AWS Serverless Application Model. This means that the Lambda functions and layers were packaged in a zip file and manually uploaded via the AWS CLI, and the AWS SAM template was being run as a CloudFormation template, which although similar, are not identical. These practices made it nearly impossible for a new development team to deploy the project. My role as a DevOps engineer was to unify the CloudFormation template and code for functions and layers in accordance with AWS SAM best practices.

<u>Technologies:</u> AWS Route53, RDS, Lambda Functions, Lambda Layers, API Gateway, S3 buckets, Docker, AWS CLI, AWS SAM.

Duration: 3 months

### **DevOps on Redmine migration - ARG**

<u>Description</u>: Migrate the Redmine tool that the company uses for tracking issues, tracking hours and billing. Was using Redmine 3.0 from the Bitnami stack and migrated to a fresh Docker image, custom tailored for Folder IT needs

My job was to create the image from a dockerfile, integrate the modifications into the plugins that the development team created and perform the migration safely, as well as create pipelines in GitHub Actions to automate the deployment of new versions of the plugins.

<u>Technologies:</u> AWS EC2, DNS, Docker, Dockerfile, MySQL, Bash Script, GitHub Actions <u>Duration:</u> 4+ months

# DevOps Engineer - Infrastructure as Code Development and Management – Canada

<u>Description</u>: In this project, the primary objective was to deploy and containerize a WordPress application, ensuring scalability and automated deployments. Key features include storing Terraform code in a BitBucket repository with a pipeline for infrastructure updates, using an S3 bucket for Terraform state, employing EFS for WordPress files, and RDS MySQL for the database. The WordPress site utilizes a plugin to convert it into HTML and CSS files hosted on an S3 Bucket for enhanced security. Additionally, the AWS infrastructure is mirrored in Google Cloud for backup purposes. My responsibilities included implementing infrastructure update pipelines, configuring cloud infrastructure mirroring, setting up monitoring software, and thoroughly documenting each process.

<u>Technologies</u>: Terraform, AWS EFS, EC2, ECS, RDS, ALB, ACM, Security Groups, Target Groups, Route53, Cloudwatch, Linux bash scripting, AWS CLI, BitBucket pipelines, Google Cloud VM Instances, Github. <u>Duration</u>: 1+ year

# **DevOps Engineer and Infrastructure Management – LATAM**

<u>Description</u>: This project involved developing a loyalty platform for petrol station employees in several Latin American countries. The platform, built with Apache and a MySQL database, is written in PHP. For each country, there are separate EC2 instances for testing and production. To enhance security, all HTTP ports are placed behind Load Balancers with WAF features and HTTPS certificates. Each country has its own domain, managed through AWS Route53, simplifying SSL certificate issuance.

My responsibilities included initially setting up the entire infrastructure on EC2 instances, providing support to developers for test and production deployments, designing and implementing a CI/CD process for automated deployments, and migrating the platform to an elastic environment by containerizing the application and running it on ECS and RDS.

<u>Technologies</u>: Terraform, AWS EFS, EC2, ECS, RDS, ALB, ACM, Security Groups, Target Groups, Route53, Cloudwatch, Linux bash scripting, AWS CLI, BitBucket pipelines.

Duration: 9 months

### **DevOps Engineer - CI/CD Setup – USA**

<u>Description</u>: The project's objective was to automate deployments from a testing server to a production server. My responsibilities included configuring a GitLab pipeline to build the application and transfer it to the production site.

<u>Technologies</u>: GitLab, Linux bash scripting, Nodejs. <u>Duration</u>: 2 months

#### **DevOps Engineer - Infrastructure as Code Maintenance**

<u>Description</u>: I was responsible for maintaining the infrastructure of a learning platform built on Django. My tasks included conducting a vulnerability assessment of the platform and making necessary security improvements using CloudFormation. Additionally, I deployed Grafana in ECS and created a CloudWatch dashboard for monitoring application health, configured alarms for specific scenarios. I also integrated a MemCached cache system accessible from the application and implemented performance optimizations for the RDS database and Nginx reverse proxy.

<u>Technologies</u>: AWS CloudFormation, RDS, ECS, ALB, SNS, ACM, Route53, Security Groups, CloudWatch, MemCached, Grafana, BitBucket, OpenVAS, Siege, Nginx.

Duration: 1 year.

#### Network and Infrastructure Manager - setup and maintenance - Mexico

<u>Description</u>: My role involved providing support and configuring essential services on both Microsoft Azure and Hetzner GmbH platforms. Key responsibilities included deploying multiple Windows Server instances in the cloud, setting up M-Files and SQL Server, managing SSL certificates for use in IIS and gRPC configurations, configuring OpenVPN to ensure secure employee access via RDP, and enhancing security through the addition of a Web Application Firewall on a reverse proxy with Nginx. <u>Duration</u>: 2 years.

### Infrastructure Support Maintenance of Infrastructure- Argentina

<u>Description</u>: I provided support to the company's IT department, focusing on infrastructure configurations. My responsibilities included the initial setup of three new Hewlett-Packard Enterprise servers via iLO, VMWare ESXi installation, and the creation of a high-availability cluster with vCenter. I performed regular maintenance tasks on the Microsoft Exchange mail server, the Domain Controller, DHCP Server, and DNS Server, all on a single Windows Server. I established VPN connections between the company headquarters and remote offices using Mikrotik routers, configured failover links, implemented a backup system for daily differential snapshots of VMs at a remote location, set up Unifi Access Points with a Unifi Controller deployed on a Docker Container, established firewall rules to control network and client access, and deployed Nagios in a container for infrastructure monitoring.

<u>Technologies</u>: HP iLO, VMWare ESXi, vMotion, vSphere and vCenter, Mikrotik vLAN and routing configuration, WinBox, Windows Server roles (DHCP, DNS, Domain Controller), Microsoft Exchange, Cloudflare, cPanel, OpenVPN, PPTP, Unifi AP and Controller, Veeam Backup, SMB. <u>Duration</u>: 2+ years

#### Duration. 21 years

# Maintenance of Infrastructure of a private clinic - Argentina

<u>Description</u>: I provided support to the company's IT department, primarily focusing on infrastructure configurations. My responsibilities included performing routine maintenance tasks on the Domain Controller, DHCP, DNS, and IIS. I established VPN connections between the Clinic headquarters and remote locations using Mikrotik routers and configured failover links for redundancy. Additionally, I completed the initial setup of Dell Servers via iDRAC, set up a backup system for storing daily differential snapshots of VMs at a remote location, deployed Unifi Access Points with a Unifi Controller on a Raspberry Pi, configured

firewall rules to restrict access to specific networks or clients, and ensured secure access to a web system hosted in IIS by configuring firewall rules and SSL certificates for HTTPS.

<u>Technologies</u>: DELL iDRAC, Proxmox, Mikrotik vLAN and routing configuration, WinBox, Windows Server roles (DHCP, DNS, Domain Controller), OpenVPN, PPTP, Unifi AP and Controller, Burp Backup, SMB, Ubuntu Server setup.

Duration: 2+ years.

# Maintenance of Infrastructure - Argentina

<u>Description</u>: I provided remote support to the IT departments of various companies, offering a range of services. My responsibilities included configuring Mikrotik routers with advanced features like vLANs, multiple ISPs, static and dynamic routing, firewall rules, and OpenVPN Servers. I created and managed cloud servers on different providers, such as Microsoft Azure, AWS, Google Cloud, and Digital Ocean. Additionally, I set up web servers and reverse proxies using Nginx, Apache, or Microsoft IIS, with automatic SSL certificate issuance via Let's Encrypt Certbot. I also configured database engines like PostgreSQL, Microsoft SQL Server, and MySQL, and established backup services using Veeam Backup and Recovery, Ghetto, and Burp. Furthermore, I handled DNS configurations on various platforms including cPanel, Cloudflare, Ferozo, and AWS Route53.

<u>Technologies</u>: HP iLO, HP ProLiant Servers, HP Enterprise MSA Storage, DELL iDRAC, VMWare ESXi, vMotion, vSphere and vCenter, Mikrotik vLAN and routing configuration, WinBox, Cisco Switches, Windows Server roles (DHCP, DNS, DC, Terminal Server), Microsoft Exchange, Cloudflare, cPanel, WHM, OpenVPN, PPTP, Unifi AP and Controller, Veeam Backup, SMB, AWS EC2, ECS, Route53, ALB, Target Group, Docker, SQL Server, MySQL.

Duration: 2+ years

# **Cloud Application Development – ARG**

<u>Description</u>: I was tasked with developing a microservices-based application. My responsibilities included setting up a CI/CD process using Jenkins to build, test, dockerize the application, push the image to DockerHub, and deploy the container in Google Cloud. I also configured service discovery using Consul and added HTTPS to secure the exposed APIs.

<u>Technologies</u>: Spring, Spring Security, Hibernate, MySQL, IntelliJ IDEA and DataGrip, Jenkins, Google Cloud, Nginx, Certbot.

Duration: 4 months.

### Introduction to Kubernetes

<u>Description</u>: This was a personal project aimed at gaining a better grasp of Kubernetes. The project involved installing Rancher k3s, configuring a Load Balancer with Nginx, setting up the Kubernetes dashboard, deploying workloads on Kubernetes using a generic Nginx container, and experimenting with scaling and scheduling within the Kubernetes environment.

Technologies: Kubernetes, k3s, Google Cloud, Nginx.

Duration: 3+ months.

# Introduction to Google Kubernetes Engine

<u>Description</u>: This was a personal project I initiated to gain a better understanding of Google Kubernetes Engine (GKE) on Google Cloud Platform. The project involved creating standard clusters, setting up dynamic clusters with Autopilot, deploying multiple endpoints with nodejs, and issuing SSL certificates with Let's Encrypt for Ingress. <u>Technologies</u>: Kubernetes, k8s, Kubernetes manifests, Google Cloud, Nginx, GKE, Ingress, GKE Autopilot, Let's Encrypt SSL Certificates. <u>Duration</u>: 2 months.

# Introduction to CD with Github Actions

<u>Description</u>: This was a personal project I undertook to explore the benefits of Continuous Deployment (CD) using GitHub Actions. The project involved dockerizing a Node.js application, pushing the Docker Image to DockerHub, deploying a Kubernetes cluster, running the Docker Image on pods, deploying Cert-Manager on Google Kubernetes Engine (GKE), and configuring DNS records to direct traffic to the cluster's IP address. <u>Technologies</u>: Kubernetes, GitHub, GitHub Actions, Kubernetes, DockerHub, Docker, Google Cert-Manager, DNS, CloudFlare

Duration: 3+ months.

### Automating Software Deployment with Terraform and AWS

<u>Description</u>: This engineering thesis project focuses on automating software development processes, emphasizing the utilization of Terraform and Infrastructure as Code (IaC) within the AWS environment. The primary objectives are to streamline the deployment of changes in testing, staging, and production environments, reducing errors and improving efficiency. Specific tasks include analyzing existing challenges, defining an automated deployment method, comparing IaC alternatives, and evaluating AWS as a cloud service provider. The proposed solution centers on implementing CI/CD practices, leveraging Terraform for infrastructure as code management, with the ultimate goal of enhancing process efficiency and ensuring robust change tracking.

<u>Technologies</u>: Terraform, AWS ECS, Fargate, EC2, Elastic Stack (ELK), RDS, DocumentDB, RabbitMQ, Consul, ACM, ALB, Route53, CloudFront, Docker, Java Spring, MongoDB, MySQL. <u>Duration</u>: 4 months.

# **EDUCATION**

Information Systems Engineer	Universidad Tecnológica Nacional - Facultad
2017 - 2023	Regional Santa Fe

# COURSES

2023	Building a Full-Stack Serverless Application on AWS	
2023	Working with ASP.NET Web API on AWS Lambda	
2023	Build and Deploy Pipelines with Microsoft Azure DevOps	
2023	Elastic Stack Essentials	
2022	English Conversation Classes – Centro de Idiomas UNL	
2022	Google Kubernetes Engine (GKE): Beginner to Pro	
2022	HashiCorp Certified Terraform Associate	
2022	A Practical Guide to Amazon EKS	

# CERTIFICATIONS

2017	Cisco Certified Networking Associate: Routing and Switching – Academia Local Cisco UTN Santa Fe

# LANGUAGES

English	Advanced
Spanish	Native