Aguirre Maximiliano

About me

My career started as an electronic engineer, understanding how technology works from the transistor level. With a strong base of structured programming languages applied directly to microprocessors firmware, I've been able to continue learning higher level programming languages consciously, always trying to find the equilibrium between ease of implementation and performance required for each use case.

Now I am focused on how the infrastructure is designed to run highly scalable and reliable applications in conjunction with the cloud, but I also really enjoy the design and development process of the application itself, which allows me to connect the challenges between the two worlds and successfully deliver a great end-to-end solution.

Professional experience

Staff Engineer – 2022/2023 (1 year)

Engineer Manager – 2021 (1 year)

Management of teams of 3 to 5 developers dedicated to design, deploy and maintain cloud infrastructure in AWS and Azure, mainly of the M&E and Gaming industries, but also including migration cases for other industries.

Part of the responsibilities included

Nextira
2019 - 2023
(4 years)

Senior DevOps Engineer – 2020 (1 year)

Development of platform for M&E and Gaming studios to move their entire studio infrastructure to AWS (with an optional hybrid mode). Infrastructure was defined modularly using Terraform to cover different client use cases. Frontend was created in React and backend was created in Python using FastAPI, both hosted as serverless services in AWS. Automations were created using AWS services (lambda, systems manager, step functions, etc.) to create and maintain resources behind the scenes (VMs, shared storage using FSx, EFS). SSO was implemented as a combination of Active Directory for server access and Cognito (with federated identities to other IdPs) to grant authentication and authorization to the app.

DevOps Engineer – 2019 (1 year)

Development of solutions for HPC companies to run compute workloads in ephemeral clusters in AWS. Dynamic clusters were created based in the AWS ParallelCluster tool, and jobs were adapted from onprem scripts to use ephemeral nodes automatically created and destroyed based on automations hooked to Slurm queues events.

PwC
2017 – 2018
(5 months)

Junior programmer

Programming and maintenance of databases in SQL.

Ternium
2019
(3 months)

Summer internship

Optimization of cold rolling process.
PLCs programming and maintenance.

Skills

AWS	• **Application hosting:** experience designing, developing and maintaining application hosted using variety of services, including the analysis to define the best strategy given the use case. Some examples of implementations done: ◦ Low level designing of hosting using **EC2** with autoscaling groups for scalability and **Systems Manager** for provisioning (with an optional build pipeline with Packer + ansible for the base images) ◦ Hosting of applications in containerized environments using **ECS** and/or **EKS** ◦ Serverless strategies for backend and frontend hosting, using **s3 + CloudFront** to host a static frontend and **lambda + API Gateway** for a serverless backend ◦ Usage of high-level services like **Amplify**, **LightSail** and **Elastic Beanstalk** to deploy apps without managing the infrastructure • **Monitoring:** extensive understanding of **CloudWatch** and its integrations with other monitoring services like Grafana. Examples of implementations: ◦ Custom automations to periodically extract metrics from endpoints, services running in servers, etc; and push to CloudWatch Metrics. ◦ Automations to install, configure and maintain CloudWatch agents in servers. ◦ Custom dashboards to give utility and visibility to infrastructure running in AWS, along with events and notifications. • **Network:** experience designing and configuring network resources for enterprise level network, including global hybrid designs using AWS managed services like Transit Gateways, S2S and Client VPNs, Direct Connect, etc. but also implementing 3rd party solutions with AWS Marketplace offerings (like Kemp Load Balancers) or self-hosted solutions. •
Azure	• **Azure Active Directory** • **Azure Virtual Desktops**
IaC	• **Terraform** • **Pulumi** • **CloudFormation and AWS CDK** • **ARM templates and Bicep**
IAM	• **Active Directory** • **Okta**
Frontend	• **HTML, CSS, JS** • **React**

Backend	• **Python**
	  ◦ **Flask**
	  ◦ **FastAPI**

CI/CD	• **GitHub actions** • **AWS CodePipeline and CodeBuild**

Languages

English	Advanced. B2 level (FCE passed in 2012). Extensive experience working fluently in this language, including 4 years of experience as a consultant managing client and partners facing meetings as Engineer Manager, Tech Lead and Senior DevOps.

Spanish	Native.

Academic background, certifications and trainings

2022	**Perforce Helix Core – Admin Enterprise Training** https://www.perforce.com/support/training/helix-core-classes

2020	**AWS Certified Solutions Architect – Associate** https://www.credly.com/badges/45e3514d-6a78-488a-9bd3-00f5437a66e1

2017 *Rosario, Santa fe* *Argentina*	**CCNA1 - Cisco Certified Network Associate** Universidad Nacional de Rosario. Final grade: 93 out of 100.

2015 *Buenos Aires* *Argentina*	**SASE attendant - Argentina's symposium on embedded systems -.** Universidad de Buenos Aires.

2012 - 2018 *Rosario, Santa fe* *Argentina*	**Electronic engineer.** **Universidad Nacional de Rosario.**

Contact information

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