

Andrés Renaud

Curriculum Vitae

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I'm an enthusiastic DevOps engineer who loves open source tools like Linux, Kubernetes, and OpenSearch to make applications more reliable.

Preferred Stack

- Kubernetes for microservices and functions
- Terraform for Infrastructure as Code
- CI/CD with GitHub Actions
- OpenSearch for observability

Other Tools

Operating Systems

Ubuntu, CentOS, SUSE, Red Hat, Debian, Windows

Cloud Platforms

AWS, Google Cloud, Azure, VCloud Director

IaC & Configuration Management

Terraform, Ansible, AWS System Manager

Computing Clusters

Kubernetes, Swarm, Hadoop, MapReduce

CI/CD Automation

Kubernetes, Docker, Git, GitHub Actions, Jenkins, Bitbucket Pipelines

Monitoring & Observability

OpenSearch, Grafana, Grafana Cloud, Datadog, CloudWatch, Prometheus, Data Prepper, OTEL, Fluent-bit, Fluentd, Logstash, Graylog, Syslog

Databases

MySQL, MariaDB, SQLite, InfluxDB, PostgreSQL, DynamoDB, Bigtable, Hive, Elasticsearch, Databricks, Superset, Metabase

Programming Languages

Python, TypeScript, C, Assembler, Bash, Java, JavaScript, LaTeX, R

Data Analysis

OpenSearch, R, Elasticsearch, Kibana, Python, MATLAB, Tableau, Excel

Product Development

Agile, Jira, Project Requirements, Planning and Management

Software Frameworks

Spring Boot, Flask, JBoss, Laravel, Kivy, Bootstrap, Express

Libraries

boto3, pandas, websocket, pyserial, ggplot2, refind, csv

Security

Apache WAFs, DB and OS hardening, HIDS for Kubernetes with Elasticsearch, TWIGS, AWS Well-Architected Framework, CompTIA Security+ (in progress)

Experience

- 2022–2024 **DevOps Engineer & Cloud Infrastructure Manager**, *Windifferent*, Montevideo, Uruguay.
- Managed AWS infrastructure and application deployments using Terraform, Kubernetes, Octopus, and Atlassian stack
 - Debugged data platforms (Databricks, Kafka) and migrated Superset/Metabase to Kubernetes
 - Created process to authorize access to data using roles
 - Managed CI/CD pipelines for CMA BE and FE and other microservices
 - Monitored systems with OpenSearch, Grafana, and Datadog
 - Managed DBA team for hardware upgrades, software updates, schema changes, HA/replication
 - Increased IaC coverage significantly (EKS cluster, VPC, OpenSearch cluster)
 - Led cloud infrastructure team in improving documentation and defining policies
 - Used Jira extensively to track project progress and team deliveries
- 2020–2022 **DevOps Engineer**, *Upwave*, Montevideo, Uruguay.
- Managed AWS infrastructure and deployments using Terraform, Kubernetes, Jenkins, CodeBuild, and GitHub
 - Researched and documented Terraform best practices
 - Managed monitoring tools: Prometheus, Grafana, and CloudWatch
 - Extensive log analysis using Elasticsearch/OpenSearch with TypeScript automation tools
 - Implemented SSM Inventory and Systems Manager Documents for server provisioning
 - Automated AWS services reporting and management using Python and Boto3
 - Managed multiple EKS clusters using Terraform and kubectl
 - Built Terraform modules and workspaces for multi-region deployments
 - Built CI/CD pipelines with Jenkins and GitHub Actions
 - Addressed security issues (UI redressing, clickjacking), added DMARC protection
- 2018–2019 **Reliability Engineer**, *Netlabs*, Montevideo, Uruguay.
- Managed Linux production environments as part of SRE team
 - Developed Business-as-a-Service solutions on VMware private cloud
 - Managed virtual infrastructure using vCloud Director and Ansible
 - Developed CI/CD pipelines using Jenkins and Git
 - Used Docker Swarm to deliver custom containers with Zabbix, ELK Stack, and HIDS
 - Created CMDB of virtual infrastructure and software using Ansible
 - Built hardened VM templates and automation scripts
 - Deployed critical updates to Java/JBoss applications
 - Administered firewalls and load balancers (iptables, F5, Fortinet)
 - Delivered high-availability web services (Apache, NGINX, Keepalived, HAProxy)
 - Deployed performance monitoring tools (Zabbix, Elasticsearch, Kibana, Grafana)

- 2017–2018 **Reliability Engineer**, *Netlabs*, Montevideo, Uruguay.
- Provided SRE services for small clients
 - Deployed JS/PHP web application for São Paulo metro ticketing with PayPal integration
 - Managed virtual infrastructure in AWS
 - Set up Jira Service Desk and created Docker-based developer environments
 - Presented Redmine and ELK stack demos to clients
 - Delivered HDInsight PaaS presentation using Microsoft Azure
 - Integrated Tableau Desktop with Hortonworks Hadoop using JDBC/ODBC
 - Acted as Level 3 System Administrator for Netgate Uruguay's email and hosting services
- 2020 **Python Full Stack Developer**, *BairesDev*, Remote / Montevideo, Uruguay.
- Ported Data Science algorithms from Python notebooks to production using GCP Cloud Functions and Pandas
 - Worked for BiolIntellisense on biomedical IoT projects
 - Modified Java libraries to accommodate expanded data inputs
 - Built data pipelines using protocol buffers and Bigtable
 - Wrote integration tests using unittest and pytest
 - Followed Agile practices using Jira and Bitbucket
- 2014–2019 **Technical Leader**, *Boxes*, Montevideo, Uruguay.
- Developed interactive vending machines with engineers and suppliers
 - Authored technical documentation for grant applications
 - Led UI/UX redesign using Python/Kivy
 - Designed Raspberry Pi shields using Arduino Leonardo
 - Built JavaScript/Java admin console with Bootstrap, deployed on AWS using Gradle
 - Developed Python clients for OpenVPN-based M2M communication
 - Replaced PyGame with Kivy to improve embedded UI performance
 - Awarded by ANII (National Research and Innovation Agency)
- 2014–2017 **Data Center Technical Leader**, *IBM Uruguay*, Montevideo, Uruguay.
- Managed physical assets and service contracts for IBM's data centers in Uruguay
 - Ensured operational compliance using Agile methods
 - Planned and executed infrastructure maintenance (UPS, generators, HVAC, panels, BMS, security, FDS)
 - Reported site status to global/regional managers with the aim of achieving RL2 and RL3 compliance
 - Led infrastructure projects including equipment deployments and move-outs
- 2007–2014 **Process Control Engineer**, *ISUSA*, Ciudad del Plata – San José, Uruguay.
- Ensured industrial communication and control systems functioned reliably in fertilizer and sulfuric acid plants
 - Built inventory and maintenance plans for all electrical equipment
 - Administered Windows servers for critical operations
 - Automated gas emissions reporting using Office macros and VBScript
 - Designed and deployed a control system for a new water treatment plant
 - Created SCADA interfaces using iFIX and Visual Basic
 - Upgraded WAN infrastructure to enable unified communications
 - Installed industrial radio links to improve site-wide networking
 - Implemented video-over-MPLS conferencing with LifeSize hardware
- Other Roles, Various.**
- 2006: Hardware repair & delivery at Municipality of Montevideo
 - 1999–2000: Weekend retail assistant at Couche Tard Minimarket, Montreal, Canada

Projects

DevOps Projects

Senior DevOps Engineer, Windifferent.

- Advanced IaC development using Terraform and Terragrunt
- Managed Kubernetes clusters created with Terraform and Ansible roles in AWS
- Deployed microservices and operators with Helm including Kafka, Prometheus, Superset, DataPrepper, and Grafana Agent
- Configured AWS services including: EKS, ECS, RDS, CloudFront, SQS, OpenVPN, OpenSearch, Lambda, SNS, CloudWatch
- Developed Ansible scripts to automate provisioning of EC2 instances
- Managed application logs with OpenSearch
- Monitored Kubernetes clusters using Prometheus and Grafana, OTEL and Data Prepper
- Added Databricks and Kafka connectivity to different data sources

Cloud Infrastructure Manager, Windifferent.

- Oversaw data access process and network access policies for AWS resources
- Created process to authorize access to data using roles and groups in Databricks
- Managed data consumption tools like Superset and Metabase, migrating from ECS to Kubernetes
- Created documentation and secured access to databases
- Proposed reference architecture to unify company assets and decrease exposure surface
- Created Python Synthetic checker agent to log checks from different networks
- Managed DBA team for hardware upgrades, software updates, schema changes

Senior DevOps Engineer, Upwave.

- Advanced IaC development using Terraform and Terraform Cloud Workspaces
- Managed Kubernetes clusters and deployed microservices with Kustomize
- Used Kustomize to integrate NGINX controllers with VS and VSR configurations
- Configured AWS services including: EKS, Beanstalk, RDS, Glue, Firehose, EMR, CloudFront, SQS, Athena
- Developed Ansible scripts to automate provisioning of compute environments
- Managed CI/CD pipelines using Octopus, Bitbucket, and JFrog
- Managed logs with OpenSearch, developed API client to automate configuration
- Monitored Kubernetes clusters using Prometheus and Grafana, Fluent-bit and OpenSearch

DevOps Engineer, Netlabs.

- Built infrastructure as code using Terraform
- Deployed VPCs, ALBs, IGWs, and integrated them with EKS clusters on AWS
- Configured autoscaling groups and Kubernetes service-account-based roles
- Implemented application monitoring with Prometheus and Grafana

SRE Engineer, Antel ASVAC.

- Applied regular updates to single sign-on portal for Antel applications
- Analyzed logs and generated visual reports using ELK stack
- Managed networking infrastructure including load balancers, reverse proxies, and NFS
- Participated in migration of frontend and API components for Vera TV to new RL3 data center

DevOps Engineer, Upwork.

- Implemented stateless Docker containers on AWS
- Used ECS and Fargate to provide scalable, resilient services
- Used Docker Compose for local and remote development
- Created Bash scripts to build and push images to ECR
- Wrote Python scripts to convert CSV inventory into Nagios-compatible CFG files

System Administrator, XN Brasil.

- Debugged full-stack applications in production
- Deployed PHP/Laravel application to AWS
- Deployed and configured Jira Service Desk

Developer Projects

Python Full Stack Developer, BioIntellisense.

- Used Pandas framework to analyze data and generate alerts
- Optimized Data Science algorithms for deployment in GCP Cloud Functions
- Built data pipelines using protocol buffers
- Stored and retrieved events from Bigtable
- Wrote integration tests using unittest and pytest

Product Developer, Antel NDG.

- Designed multilayer reference architecture for IaaS clients using vCloud Director
- Managed Linux VM templates using Ansible
- Managed web access with Apache mod_proxy, pfSense, and vShields Deployed ELK stack and Zabbix servers using Docker

Full Stack Developer, Boxes.

- Replaced PyGame with Kivy for improved embedded UI performance
- Redesigned Raspberry Pi "shield" circuit boards to reduce cost and build time
- Created IoT broker service using Java WebSockets
- Developed Bootstrap/JavaScript admin console, deployed on AWS with Gradle
- Wrote Python client to enable M2M communication via OpenVPN

Education

Courses

- 2025 Hackerrank Python Training
- 2025 Entry-Level Security – Cybrary
- 2024 Introduction to Deep Q Learning – Udemy
- 2022 Terraform Associate Certification – HashiCorp
- 2022 Terraform Beginner to Advanced – Udemy
- 2020 Amazon Elastic Kubernetes Service Workshop – Online
- 2019 Use Python to Access Web Data – Online
- 2019 TEFL English Certificate – Thresholds Institute, Prague, Czech Republic
- 2018 Agile Scrum Master Introduction – XN, Montevideo, Uruguay
- 2017 Introduction to Tableau – Deloitte, Montevideo, Uruguay
- 2017 Azure Cloud Specialist + Open Source – Online
- 2017 AWS Solutions Architect – Online
- 2015 Introduction to Agile – IBM, Montevideo, Uruguay

Academic Studies

- 2009–2012 Impedance Spectroscopy Specialization, Facultad de Ciencias, UDELAR, Montevideo
- 2001–2008 Electrical Engineering, Facultad de Ingeniería, UDELAR, Montevideo
- 1999–2001 Pure and Applied Science, Vanier College, Montreal, Canada

Public Speaking

- 2019 Virtual Infrastructure Best Practices – Presented multilayer reference architecture to internal teams and clients at HG
- 2017 Open Source and Big Data on Azure – Presentation at Sinergia Tech with Microsoft Uruguay and Netlabs
- 2010–2011 Study of Metal–Protein Interactions Using Impedance Spectroscopy – Presented at CSIC and Instituto de Higiene, UDELAR

2009 Voice Enhancement Using Artificial Neural Networks – Presented as part of specialization course in neural networks, Facultad de Ciencias, UDELAR

Languages

Spanish (Native), English (Advanced), Portuguese (Basic)

Interests

Music, Aikido, Surf, Food and Nutrition, History