#### Contact

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www.linkedin.com/in/adrianmf94 (LinkedIn)

## Top Skills

Cursor

Integración continua y entrega continua (CI/CD)

**MCP** 

# Languages

Español (Native or Bilingual) Inglés (Full Professional) German (Elementary)

#### Certifications

Google Cloud Platform Big Data and Machine Learning Fundamentals

AWS Certified Al Practitioner Early Adopter

Tecnologías Big Data

Google Cloud Platform Big Data and Machine Learning Fundamentals

#### Honors-Awards

Mejor promedio

# Adrian Monge

Al Developer | LangGraph | AWS | Python | Data | Infra Spain

# Summary

I'm an experienced professional with nearly 8 years of expertise, evolving from BI and Data Engineering to Python development, AWS infrastructure management, and most recently, AI tool developmen. Over the past 5 years, I've focused on designing and managing robust AWS environments, with a strong background in DevOps, Backend development, and AI innovation.

In my current role, I oversee the entire AWS ecosystem, ensuring seamless operation and efficiency across all services. My work includes developing Al-driven tools using cutting-edge technologies like LangChain, LangGraph, and I'm passionate about expanding my expertise in this field.

# Core Competencies:

- AWS Infrastructure & DevOps: Lambda, Glue, CDK, API Gateway, Athena, S3, VPC, CloudFormation, Pulumi
- Backend Development: Python, NodeJS, Neo4J
- Al Development: LangChain, LangGraph, LangFlow
- Automation & Integration: Make.com
- Data Engineering: (Previous experience) SQL (Oracle, MS SQL Server, Snowflake), MS SSIS, SSAS, Pentaho, Hadoop

# **Future Aspirations:**

I'm committed to leveraging my skills to build innovative Al solutions and to continue offering my services in Al automation.

# Experience

Brighthive

2 years 10 months

Al Developer

November 2024 - Present (9 months)

Architected and developed a sophisticated Al-powered data platform using LangGraph's multi-agent framework, implementing a distributed system of specialized agents for enterprise data operations.

**Key Technical Contributions:** 

- Multi-Agent Architecture: Built supervisor-orchestrated system with 7+ specialized agents (retrieval, governance, visualization, DBT, analyst) using LangGraph's StateGraph pattern
- Advanced Retrieval Agent: Engineered parallel SQL generation across multiple models (GPT-4, Claude Sonnet, Gemini) with hybrid retrieval combining template matching and dynamic query generation for data warehouses (Redshift/PostgreSQL) and Neo4j graph databases
- Intelligent SQL Critique System: Developed self-improving pipeline with LLM-powered critique agents that analyze result relevance, automatically refine queries, and iterate up to 3 attempts for optimal data retrieval
- Governance Agent: Built data governance orchestrator with automated quality checks, metadata management, and policy compliance validation
- Supervisor Agent: Implemented advanced orchestration using langgraphsupervisor library with custom prompt engineering and multi-step workflow management

#### Advanced Al Techniques:

- Prompt Engineering: Designed structured prompts with role-based delegation and context-aware reasoning patterns
- Multi-Model Pipeline: Integrated multiple LLMs with concurrent execution and intelligent model selection
- Tool Integration: Built 20+ custom tools for GitHub operations, data warehouse connections, and platform APIs
- Modern Development Tools: Proficient with Cursor IDE for Al-assisted development and MCP (Model Context Protocol) for seamless Al tool integration with data sources

Technologies: Python, LangChain/LangGraph, Neo4j, PostgreSQL, AWS Redshift, Anthropic Claude, OpenAl, Docker, FastAPI, Poetry

Successfully deployed production-ready system handling complex data workflows with proper error handling, logging, and scalable architecture.

AWS Infrastructure Engineer | DevOps & Backend Specialist October 2022 - Present (2 years 10 months)

#### Current Role:

- Architect and deploy comprehensive AWS CDK stacks to establish and maintain robust cloud infrastructure.
- Develop and optimize Lambda functions using Python, ensuring efficient execution and integration within the broader AWS ecosystem.
- Automate the creation and management of AWS accounts within AWS
   Organizations, leveraging infrastructure as code to streamline processes.
- Design and implement secure IAM policies, roles, and user access controls, adhering to best practices in cloud security.
- Resolve complex cross-account deployment challenges, ensuring seamless operation across multiple AWS environments.
- Lead initiatives to integrate Al-driven solutions into existing systems, including data processing enhancements and predictive analytics, utilizing AWS services and custom-built Python models.
- Collaborate with cross-functional teams to drive innovation and operational excellence in cloud infrastructure management.

## Technologies & Services:

- AWS: CDK, Lambda, Redshift Spectrum, S3, Organizations, VPC, Security Groups, IAM
- Al & Data: Python-based Al models, predictive analytics integration

#### Experian

Data Engineering Analyst II
April 2021 - October 2022 (1 year 7 months)

- Create and maintain Snowflake Database objects such as Schemas, Tables, Pipes, Stages

(with AWS S3), Stored Procedures and Tasks

- Develop Python scripts to move files between AWS S3 and EC2 Instances
- Process JSON files using AWS Lambda functions on Python
- Generate and maintain ETL processes on Alteryx
- Monitor data quality and create new dashboards using Tableau

#### Mentawai

AWS Data Engineer / Developer / DevOps - Freelancer February 2021 - October 2022 (1 year 9 months) Remote

Client: Brighthive - AWS DevOps/Backend Engineer

- Implement AWS CDK Stacks to deploy Infrastructure
- Develop Lambda functions in Python
- Automating creation of AWS Accounts from AWS Organizations through code
- Creating users, roles, policies in AWS IAM following Security best practices
- Solving cross-account deployments
- Services: AWS CDK, Lambda, Redshift Spectrum, S3, Organizations, VPC, Security Groups, IAM

Client: Trovo.ai – AWS Data Engineer

- Creating PySpark jobs on AWS Glue to process GBs of data stored on S3
- Developing on Python for data cleansing mostly on emails, special characters and addresses
- Performance tuning on PySpark jobs
- Querying data on AWS Athena, validating data consistency
- Developing AWS Lambda functions

Client: Farmly - Backend Developer using AWS Serverless Framework

- Developing Microservices using Flask API and then migrating to AWS Lambda
- Creating functions that run async using Lambda and Boto3
- Develop and maintain API Endpoints using AWS API Gateway
- Other tools used: GitLab, serverless-offline, CI/CD, CloudFormation

Client: Wrench.ai – AWS Data Engineer

- Develop Python code to generate metrics from jobs executions
- Monitoring AWS Glue PySpark jobs
- Developing and maintaining AWS Lambda Function

#### Equifax Costa Rica

**Data Engineer** 

April 2019 - March 2021 (2 years)

- Develop a new Data Warehouse in an internal Cloud Server on MS SQL
   Server to store historical data and migrate new data for batch requests from clients
- Create SQL Server Integration Services ETLs on the source to extract data and other ETLs using Pentaho Data Integration on the destination for incremental loads
- Implement encryption/decryption on the data and automate uploads and downloads from SFTP server

- Schedule jobs using Atlassian Bamboo. Configure email alerts to track possible errors
- Collaborate in a new Hadoop project using Cloudera, sending and encrypting data to be uploaded in this new repository according to Data Scientist's needs
- Help Data Scientist learn HiveQL to analyze data
- Standardize data loads using Python as the ETL tool (mostly with PyODBC and Pandas)
- · Write Windows batch scripts to automate those processes
- Automate a manual process that lasted 5 days into a simple script that ran in
   15 minutes

#### **NOXTAK GROUP**

Data Engineer

September 2018 - March 2019 (7 months)

Costa Rica

- Worked on a project that involved gathering data from an iOS application, extract the data on a web app in CSV and JSON format. Used Python to read those files and then using R (moslty dyplr) I developed some scripts to preprocess the data and then create some visualizations using that information on R and Tableau
- Participated in the World's Most Important Technology Event, CES 2019 in Las Vegas with other colleagues to expose on Big Data and Blockchain advantages on electro-smog (company's specialization)

#### Telefónica Costa Rica

2 years 4 months

Business Intelligence Marketing June 2017 - September 2018 (1 year 4 months)

- OLAP Data Cubes Development and Maintenance using Oracle SQL for data extraction and Microsoft SQL Server Integration Services, Analysis Services and Reporting Services to publish cubes about marketing incomes and client's information
- Be in charge of all marketing information needs.
- Data engineering processes on Oracle
- · Automate different tasks
- Advise other team members with information gathering and transformation
- Worked with a Business Analysts in order to perform monthly and yearly predictions on different business KPIs

**Business Intelligence Analyst** 

## September 2016 - June 2017 (10 months)

Costa Rica

- OLAP Data Cubes Development and Maintenance using Oracle SQL and Microsoft SQL Server Integration Services, Analysis Services and Reporting Services.
- ETL processes for data collection and transformation on different databases and data files. Perform SQL procedures, queries and data manipulation.
- Analyze and validate all information delivered.
- Develop reports according to business needs. Work closely with other department to accomplish requirements of data information.
- Work on reports and assist to meetings with Sutel's (Government entity) information needs.

#### Pasante

June 2016 - September 2016 (4 months)

Costa Rica

Worked as a Software developer for a project using technologies such as PHP and Javascript

#### **CEDES Don Bosco**

Profesor Java

July 2015 - October 2015 (4 months)

Professor occupying a temporary position due to disability in the 10th year of the specialty: Technician in Software Development.

- -Introduction to Java
- -Variables, methods
- -Cycles
- -Vectors and matrices
- -Application and evaluation of exams

## Repuestos La Guacamaya

9 months

#### IT Support Technician

October 2014 - March 2015 (6 months)

Paso Ancho, San José, Costa Rica

- -Microsoft Windows Server 2008/2012
- -Active Directory Users and Computers
- -Windows Problem Solving for users
- -VM Ware Player
- -Printers

- -Tight VNC Remote Control
- -Remote Desktop Service Manager

# Human Resources Assistant July 2014 - October 2014 (4 months)

Paso Ancho, San José, Costa Rica

- -Resposible for processing surveys and sent statistics to the bosses of each department
- -Process information about the company's payroll

# Education

Universidad Cenfotec

Data Analytics-Big Data, Postgrado · (2017 - 2018)

University of Colorado Denver

Data Warehousing for Business Intelligence, Business
Intelligence · (2016 - 2016)

Universidad Latinoamericana de Ciencia y Tecnología Ingeniería informática · (2014 - 2016)

Saint Michael High School
Bachelor's degree, Educación secundaria · (2007 - 2011)