

IVÁN ARTURO SALAZAR ORTIZ

Systems and computing engineering - Data Engineer
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EDUCATION

Master in Universidad de Los Andes

expected graduation year 2023

- Master in data engineering ([MINE](#))
- Relevant Coursework: Big data analytics, Cloud, Machine Learning, Security and privacy.

Universidad de Los Andes

2020

- Systems and Computing Engineering.
- Thesis: Automatic Meter Reading using neural networks. (Applied in a real context/company)
- Relevant Coursework: Technology infrastructure fundamentals, Algorithm design and analysis, Transactional systems, Software architecture and design, Enterprise architecture, Business intelligence, Communications infrastructure, and Construction of mobile applications.

Universität Mannheim

2019

- Erasmus — exchange program with studies in data science (Master's class), security in IT and information security.

WORK EXPERIENCE

Wireless & Mobile - Remote

January 2020 - present

Data Engineer - Innovation consultant

- Improved data pipelines reducing execution time between 40% to 92%, concurrently decreasing disk storage usage by 80% for the data ingested in a database.
- Built the initial infrastructure for MLops (level 0) in GCP compute engine, improving CI/CD in Machine Learning life cycle with tools that help having a central registry for tracking, artifacts (important files) and to be able to recreate the models. (Mlflow, SFTP server, postgresql, jupyter notebooks)
- Lead the process of bringing new technologies to different projects and contexts, focused on data science, big data, MLops and infra-structure.
- Built pipelines and AI models from development to production, for different clients. For example I built a model for improving processes like fraud detection in energy consumption from 30% to 200% depending on the region.
- Applied my knowledge from my "Research teacher assistant" in Andes university (COL) in the context of the company (Pipelines, ETLs, ML, MLops, Big data, Python, PySpark, Spark, MLlib, GCP, Docker, MLFlow, relational and non-relational databases).
- My undergraduate thesis "Automatic Meter Reading using neural networks" was a cooperative work with this company.

Universidad de los Andes - Hybrid

August 2021 - December 2022

Research teacher assistant

- Development and maintenance of an autonomous grading tool for Python programs using Python and containers (Docker) that is being used in the course, "analytical solutions deployment" at Master level.
- Participated in the development of a massive open online course (MOOC) with a diverse team from different countries, and integrated an automatic grading tool for programming assignments for the class "deployment for analytical solutions" for the Master in Data Analytics Intelligence ([MIAD](#)) .
- Back end development for an analytics solution including pipelines, related to professors investigations, promotions, publications, etc.
- Other technologies used: GCP, S3, Lambda, load balancers, Heroku, Sendgrid, Redis, AWS SQS, AWS auto scaling, ec2, RDS, docker, docker-compose, Python, JavaScript, Typescript, Pyspark/Spark, Mlflow, relational and non-relational databases.

Universidad de los Andes - Remote

Second semester 2022

Leader teacher assistant at master level

- Tutored students in a master degree class called "analytical solutions deployment" related to MLops and Big data ([MIAD](#), Master in Data Analytics Intelligence)

- Guided and graded students during the course activities.
- Assessed students doubts related to the class concepts.
- Technologies: Python, PySpark, Spark, MLib, GCP, Docker, MLFlow, relational and non-relational databases.

Universidad de los Andes

Second semester 2015

Undergraduate teacher assistant

Course: Algorithms and object-oriented programming.

- Guided students in the basics of OOP (object Oriented Programming) model in java.
- Graded students programming assignments.

LEADERSHIP & ACTIVITIES

Universidad de los Andes

August 2021- December 2022

Research teacher assistant

- Led a small Team with undergraduate students for a web development project in the university. (Full-stack, ETLs)

Universidad de los Andes

Second semester 2022

Leader teacher assistant at master level

- Led a small Team of tutors and distributed activities that had to be done for the class and the students.

TECHNICAL STRENGTHS AND INTERESTS

Programming languages : Python, TypeScript, java, JavaScript, HTML and CSS, SQL, No SQL.

Databases: Relational and non-relational databases. Mongo, postgres, mysql, mssql, DynamoDB, s3, cloud storage.

Agile Methodologies: Scrum.

Soft-Skills: Organized, Time management, Compromised, and Teamwork.

Languages: Spanish (native), English (Advanced), German (Basic).

Interests: Finance, Big data, development, infrastructure, exercise, market and technology, AI.

COURSES

- [Innovar](#), Coursera *2020*
- [Computer security: defense against the digital arts](#), Coursera *2020*