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

- Semester aboard with studies in data science (Master's class), security in IT and information security.

WORK EXPERIENCE

Wireless & Mobile - Remote
January 2019 - present
Innovation consultant

- Improved data pipelines speed between 170% to 1.300% causing a reduction in 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, to 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.
- Applied my knowledge from my "Research teacher assistant" in the context of the company (Pipelines, ETLs, ML, MLops, Big data, Python, PySpark, Spark, MLib, GCP, Docker, MLFlow, relational and non-relational databases.).
- Built pipelines and AI models from development to production, for electric energy fraud detection. The detection of fraud improved between 30% and 200% in different regions compared to what the company detected before.
- My undergraduate thesis "Automatic Meter Reading using neural networks" was a cooperative work with this company.
- Knowledge brokering to my colleagues.
- Documentation for TRL (Technology Redines level, maturity level).
- Android development with Koltin in the first year. (Experimenting with different face recognitions tools like AWS rekognition)

Universidad de los Andes - Hybrid
August 2021 - December 2022
Research teacher assistant

- Worked with a diverse team from different countries.
- 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), and integrated automatic grading tool for programming assignments 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 related to MLops (**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 (obejct 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 under graduated students for a development 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. (Full-stack, ETLs)

TECHNICAL STRENGTHS AND INTERESTS

Programming languages : Python, TypeScript, java, JavaScript, HTML and CSS, SQL, No SQL.
Databases: Relational and non-relational databases. Mongo, postgress, mysql, mssql, DynammoDB, 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*