

# Nicolas Argota

PH.D. IN ENGINEERING | MASTER IN BIG DATA AND DATA SCIENCE |  
DATA SCIENTIST AWS

## ABOUT ME

I have successfully led end-to-end data projects, overseeing data collection, analysis, machine learning modeling, and cloud architecture design. With more than 5 years of experience in Python for production projects, I have honed my skills in machine learning and deep learning techniques, including CNNs and Transformers, ensuring the development of robust models. Additionally, my familiarity with agile methodologies, scrum methods to ensure that projects are executed efficiently. With a solid foundation in descriptive statistics and excellent English communication skills, I consistently deliver actionable insights that align with business goals.

## SKILLS

- AWS Services:** Sagemaker, DynamoDB, Lambda, S3, EC2, CloudWatch, IoT Core, CloudFormation,
- GCP Services :** Vertex AI , Search & Conversation , GEMINI, LookerStudio,Workspace.
- Programming languages:** Python, R, C++,SQL,Shell.
- BI Tools:** Quicksight,Tableau,VBA, LookerStudio,Excel,Power Point.
- Big Data:** HDFS,Apache Hadoop, Spark, AWS, MongoDB,NoSQL,Apache Airflow
- AI library:** Numpy,Pandas,PySpark, TensorFlow,Scikit-Learn,OpenAI.
- Agile Method:** SCRUM, KANBAN.

## WORK EXPERIENCE

- Articae**  
AWS Solution Architect - April 2023 - September 2023
  - Designing and developing data architecture and environments to enable scalable analytics.Data orchestration.
  - Developing and implementing various services offered in the AWS cloud computing platform.
  - Creating different data visualization environments, dashboards, and reports.
- Sanzar Agroaerospace**  
Data Scientist - FoodTech/Precision Agriculture February 2022 - August 2022
  - Developed a Machine Learning model to predict the optimal distribution of nutrients in crops. Saved up to 15% in production costs.
  - Deployed ML model in AWS with a Lambda architecture, Pyspark as processing tool, S3 as storage and Flask as front app.
  - Pitched research results in Madrid Innovation Food. Fund raised 200k euros for the start-up.
- Argentinian Judiciary Power**  
Data Scientist - Human Resources February 2019 - currently
  - Design and implementation of Artificial Intelligence solutions in the legal field, utilizing advanced language models such as Large Language Models (LLM), GPT,Gemini, Llama, and Langchain.
  - Creation of specialized applications for searching jurisprudence, legislation, and legal resolutions, employing advanced language models and integrating chatbots.

### Arizona University - Informatics Computing and Cybersecurity, USA

- IA Researcher August 2018 - December 2018
  - Research on artificial intelligence for satellite and drones imagery, supporting firefighters to prevent and help in case of forest fires
  - Design of an intelligent communication system with applications in case of natural disasters, regions with lack internet and national defense.
  - Teacher Assistant in applied Mathematics for advanced undergraduates students. Didactic workshops to international students.

### Telecommunication Lab - Electronic and Computing College UNT, Argentina

- IA Researcher August 2017-September 2021
  - Member of the IA - machine learning team.
  - Acquisition, storage and visualization of Space Weather/Climate information. Forecast Solar flares to predict communications failures.
  - Conducted 5 undergraduate students thesis.

## EDUCATION

- Master in Big Data and Data Science at Universidad Autónoma de Madrid (2021-2023)
- PhD in Engineering at Universidad Nacional de Tucuman- Argentina. My thesis is about Digital Communications Systems, Machine Learning,Data Mining and Software Defined Radios (2017-2021)
- BsC in Electronic Engineer, specialized in Telecommunications (Universidad Nacional de Tucumán - Argentina) (2011-2016)

## LANGUAGES

Spanish : Native                      English: Fluent                      Portuguese: Advanced                      Italian: Basic