



DANIEL FELIPE BARON ESPITIA

📍 Bogotá D.C.

📞 3175351526

✉️ df.baron10@uniandes.edu.co

SKILLS

- Python
- SQL
- TensorFlow, Pytorch, Scikit-Learn
- FastAPI, Flask
- Docker
- Git
- Google Cloud Platform (GCP)

COURSES AND CERTIFICATIONS

- Achieving Advanced Insights with BigQuery, Google Cloud
- Exploring Your Ecommerce Dataset with SQL in Google BigQuery, Google Cloud
- Exploring and Preparing your Data with BigQuery, Google Cloud
- Data Science for All, Correlation One (360 horas).
- Neural Networks and Deep Learning, deeplearning.ai (30 horas)
- Google Cloud Platform, Big Data and Machine Learning Fundamentals, Google Cloud
- Modernizing Data Lakes and data Warehouses using GCP, Google Cloud
- Machine Learning, Andrew Ng - Universidad Stanford
- Introduction to Python Programming, Universidad Católica de Chile

ACTIVITIES AND AWARDS

Recipient of the 'Ser Pilo Paga' Scholarship. Bogotá, Colombia. November 2014.

PROFESSIONAL SUMMARY

Biomedical Engineer with a Master's degree in Computer and Systems Engineering, specializing in Artificial Intelligence from the Universidad de los Andes. My expertise spans the construction of Extraction, Transformation, and Loading (ETL) pipelines for information sourced from diverse data sets. I am well-versed in implementing and developing Machine and Deep Learning models, including Recommendation Systems, utilizing frameworks such as PyTorch and TensorFlow, as well as libraries like scikit-learn. Additionally, I have hands-on experience in project development using On-Cloud platform tools such as Google Cloud Platform. I am skilled in ensuring the availability and efficient deployment of models through Flask or FastAPI, with a proficiency in code versioning using Git, and project containerization with Docker. My background includes effective collaboration within multidisciplinary teams for the successful execution of projects.

EDUCATION

August, 2021 - August, 2023

Master's in Computer and Systems Engineering: Artificial Intelligence
Universidad de los Andes | Bogotá D.C., Bogotá
GPA: 4.5/5.00

January 2015 - December, 2018

Biomedical Engineering
Universidad de los Andes | Bogotá D.C., Bogotá
GPA: 4.05/5.00

PROFESSIONAL EXPERIENCE

October 2023 – Current

Davivienda | Bogotá D.C.
Specialist Data Scientist Lead – Analytics Audit

- Leadership and guidance of a team of data scientists and data analysts in the development of projects addressing issues in the auditing area.
- Creation of a pipeline for extracting recurrent issues based on PQRS requests using word embeddings, clustering, and prompt engineering (ChatGPT API).
- Development of a graph-based model for identifying inappropriate practices in credit approval by bank employees or external individuals.

November 2022 – October 2023

Davivienda | Bogotá D.C.
Data Analyst – Davivienda Open Analytics

RESEARCH PAPERS

- Manuel Camargo, Daniel Barón, Marlon Dumas, Oscar González-Rojas. Learning business process simulation models: A Hybrid process mining and deep learning approach". Information Systems. 2022
- Daniel Barón, Marlon Dumas, Oscar González-Rojas. Coral: Conversational What-If Process Analysis. ICPM. 2022
- Jorge Bejarano, Daniel Barón, Oscar González-Rojas, Manuel Camargo. Discovering optimal resource allocations for what-if scenarios using data-driven simulation. Frontiers in Computer Science. 2023

- Development of essential data extraction, transformation, and loading (ETL) processes related to financial transactions and customer behavior.
- Construction of reports for the analysis of customer behavior across multiple businesses, providing a robust foundation for strategic decisions and enhancements in customer experience.
- Application of advanced data analysis techniques, including segmentation and trend analysis, to identify patterns and business opportunities within Open Banking data.
- Collaboration with multidisciplinary teams, including developers, data engineers, and other data scientists, to ensure data quality and the effective implementation of analytical solutions.

August 2022 - Current

Hobby | Bogotá D.C.

AI Developer - Freelance

- Development and implementation of Recommendation Systems for offering personalized product recommendations to platform customers.
- Development and implementation of a search engine for filtering businesses based on keywords.
- Creation of a Web Scraping system to validate the existence of businesses registered on the platform.

August 2021 – August 2023

Universidad de los Andes | Bogotá D.C.

Graduate Research Assistant

- Participation as a Research Assistant in projects related to Process Mining, with a focus on enhancing the efficiency of business processes using Machine and Deep Learning models.
- Development of an advanced tool for optimizing business processes, employing Natural Language Processing (NLP) techniques with the goal of enhancing resource efficiency and activities within business processes.
- Development of a chatbot capable of generating, configuring, and optimizing simulation scenarios within business processes using generative models. This aims to contribute to more informed decision-making and continuous improvement of these processes.

August 2020 – August 2021

Seguros Bolívar S.A. | Bogotá D.C.

Data Analyst

- Support to various company departments in migrating projects to the Google Cloud Platform (GCP).
- Creation of an OCR system for identifying relevant information in insurance policy documents using Python and Google Cloud Platform tools (GCP).

August 2019 – August 2020

Seguros Bolívar S.A. | Bogotá D.C.

Executive Analytics Assistant

- Migration of business information from an Oracle server to an On-Premise platform on Cloudera.
- Migration and enhancement of a Customer Lifetime Value (CLV) model to assess the company's customer valuation.

RELEVANT PROJECTS

- Universidad de los Andes, Bogotá June, 2022 – August, 2023

AI Developer

Development of a chatbot specialized in generating simulation scenarios by modifying simulation parameters and control flow. Implemented an LSTM (Long Short-Term Memory) model for the effective and accurate generation of these scenarios.

- Universidad de los Andes, Bogotá June, 2022 – August, 2022

AI Developer

Electoral Prediction Project for the 2022 Colombian presidential elections. Conducted a comprehensive NLP analysis of Tweets from various users and corresponding macroeconomic data for the election year.

- Universidad de los Andes, Bogotá August, 2022 – December, 2022

AI Developer

Research project focused on creating a noise elimination algorithm for low-dose radiation CT images, targeting cancer patients. Implemented a Generative Adversarial Network (GAN) for image reconstruction.

- Universidad de los Andes, Bogotá August, 2021 – December, 2021

AI Developer

Development project of a classification algorithm for multimedia content generated through DeepFake using Convolutional Neural Networks and pretrained networks such as InceptionV3 and VGG16.

- Universidad de los Andes, Bogotá August, 2018 – December, 2018

AI Developer

Development project of an algorithm for detecting different levels of Diabetic Retinopathy based on images of patients' optic discs using Machine Learning models.

LANGUAGES

Spanish:

- Level: Native

English:

- Level: Conversational