María Angélica Portocarrero

+57 321-825-7827

angelica.portocarrero04@gmail.com

https://www.linkedin.com/in/angelica-portocarrero/

Cali, Colombia

OBJECTIVE

I am a last year student of Data Engineering and Artificial Intelligence. My background includes developing machine learning models and AI solutions, leveraging techniques like Fine-Tuning and RAG, as well as developing ETL pipelines for data processing. My strong passion for personal and intellectual development has led me to enroll in various academic projects and student groups. I am commited to apply and keep growing my knowledge and skills in a dynamic professional environment and contribute to the success of the team.

ACADEMIC BACKGROUND

Leadership School   Mar 2024 - Jun 2024
Universidad Autónoma de Occidente • Cali, Colombia

- 52nd Promotion
- Learned skills of assertive communication, teamwork, leadership, and creativity strategies and developed the Break Zone project to help university aid in student wellness during final exams season.

Google Cloud Computing Foundations Certificate   Apr 2024 - May 2024
Google Cloud Computing Foundations Academy • Cali, Colombia

- "Building Together" Program in association of ACOFI and Google Cloud Learning.
- Enrolled in four 10 hour digital courses to learn Google Cloud product management.
- Learned Cloud Infrastructure, Networking and Security, and Cloud Data, ML and AI. Additionally, earned four badges for successfully completing fur additional challenge laboratories.

M320: Data Modeling   Oct 2022
MongoDB University

- Learned NoSQL database management and data modeling principles through numerous lectures and hand-on labs.

Data and Artificial Intelligence Engineering   Jul 2021 - May 2025
Universidad Autónoma de Occidente • Cali, Colombia

Full-time Undergraduate

SKILLS

- Data science and Data Engineering with Python
- Artificial Intelligence and Machine Learning with TensorFlow, Keras and PyTorch
- Statistical data analysis with R
- Data visualization with Power BI
- Database management with MySQL, PostgreSQL and MongoDB
- Data workflow automation & ETLs with Apache Airflow
- Familiar with Web Development with HTML, CSS, Vue Js and Node Js

ACADEMIC AND RESEARCH EXPERIENCE

Large Language Model Chat UAO Developer
Mar 2024 - Present

Universidad Autónoma de Occidente • Cali, Colombia

- Development of a Large Language Model application to improve accessibility and understanding of academic processes at institutional level, using data processing, RAG and Fine-Tuning techniques. Associated to the Institutional Artificial Intelligence research seedbed.
- Performed an exhaustive literature review about Large Language Models development, personalization and use.
- Applied Retrieval Augmented Generation with Langchain to LLaMA3 model using university docuements and web pages.
- Successfully prototyped the final product in streamlit environment.
- Fine-tunning the model with a self-made dataset of institutional information.

Point Pattern Analysis of Fatal Traffic Accidents Data in the City of Cali
Aug 2024 - Sep 2024

Universidad Autónoma de Occidente • Cali, Colombia

- Applied point pattern analysis in R for fatal traffic accidents in Cali for 2009 and 2010.
- Successfully fitted a model that describes the behavior of fatal traffic accidents data.

Chicago Criminality ETL Data analysis
Sep 2023 - Nov 2023

Universidad Autónoma de Occidente • Cali, Colombia

- Developed an ETL data pipeline with Apache Airflow for a 7 Million row dataset to explore chicago criminality.
- Performeed an API call to constantly update crimes data.
- Transformed data and loaded it in batch processing to a MySQL Server to make a static Power BI report with a heatmap of crime density.
- Streamed data with apache kafka to make a real-time dashboard with Power BI.

Smarteams Platform
Sep 2022 - Nov 2022

Universidad Autónoma de Occidente • Cali, Colombia

- Developed a Web application to manage agile and successful interdisciplinary student teamwork.
- Leveraged VueJS for frontend development, and Node.JS for backend.
- Developed a database model for the application with MongoDB.

ACADEMIC ACTIVITIES

MEI Student Group Leader
Mar 2023 - Present

Universidad Autónoma de Occidente • Cali, Colombia

- Leader of the group that promotes the participation of women in the engineering and science field in the community through activism projects and the strengthening of technical and soft skills.
- Gained strong experience in assertive communication, leadership and teamwork.