

LUIZ FERNANDO COSTA DOS SANTOS

Machine Learning Engineering

☎ +55 (83) 98691-5219 ✉ luiz.costa@academico.ufpb.br 🌐 luiz-fernando632 📧 luiz826

Languages: Portuguese, English, Spanish

EXPERIENCE

Nubank

09 2022 – Present

Machine Learning Engineering

Hybrid - São Paulo, Brasil

- Played a pivotal role in utilizing Spark Scala to architect and refine the underlying pipelines and datasets for a cutting-edge machine learning model. This optimization greatly improved data processing efficiency and model performance.
- Demonstrated proficiency in Python to orchestrate the deployment of a sophisticated machine learning model in both batch and real-time online production environments, ensuring seamless integration into the company's data ecosystem. This helped to increase the models AUC and the credit card approval rate
- Implemented a migration to a Data Mesh environment of the logical ETL. This saves a huge amount in dataset costs and increase the data governance between the company teams.

Huawei and Embrapii

02 2022 – 09 2022

Machine Learning Engineering

João Pessoa, Brasil

- Created an dataset for solar characterization using solar data of Brazilian cities to predict the optimal angle to the solar tracker.
- Created an ETL using Docker, Airflow, InfluxDB and Grafana. The pipeline was: collect the data from real trackers, forecast it, using random forest and store on the time series database to monitor on the Grafana dashboards. This solution increased a lot the energy gains, mainly on cloudy days.

EDUCATION

Univesidade Federal da Paraíba

Expected 05 2024

Data Science and Artificial Intelligence

9.3 / 10

SKILLS

- | | | | |
|-------------------------|------------------|--------------------|-----------------|
| • Data Engineering | • Data Warehouse | • Model Deployment | • Data Mesh |
| • Analytics Engineering | • Data Lake | • ETL | • SQL and NoSQL |

PROJECTS

Playing the Shannon's Game with GPT |

2024

- On this project, I implemented the Shannon's Game with the goal of measure the entropy of LLM's models. The game has several implicit concepts of information theory and it measures the amount of mean information of the user, in this case the GPT. And the result was that the LLM behaves well, but not as good as humans yet.

TECHNICAL SKILLS

Languages: Scala, Python, SQL, R, Matlab, C, C++, Java, Clojure

Technologies/Frameworks: Spark, Linux, GitHub, Databricks, Docker, Kubernetes, AWS, Datomic, InfluxDb, Grafana, Postgres, TensorFlow, Pandas, Numpy, Matplotlib, PyTorch, Scikit Learn

EXTRACURRICULAR

TRILha (TRIL Lab)

06 2024 – Present

Member

João Pessoa, Brazil

- Participated as a member and a Advisor of the TRILha project, that was a project that has the goal of help new students of UFPB to be familiar with the computer science world. Throughout the project I gave lectures and helped students with exercises and projects.

Technology and Artificial Intelligence League (TAIL)

02 2021 – 03 2023

AI Researcher

João Pessoa, Brazil

- Participated as a member of several projects that envolved AI and machine learning, such as a Music Genre predictor, using just the lyrics (Try it here) and a starter version of an Automatic description of football matches actions using Yolo to help visually impaired to watch the games.