

LUIZ RENNÓ COSTA

Data Scientist | Data Engineer | Machine Learning Engineer

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Rio de Janeiro, Brazil

in luiz-rennó-costa

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STRENGTHS

Python pandas numpy

sklearn keras tensorflow

Data Wrangling ETL/ELT

ML Pipelines ML Modelling

Docker Kubernetes

SQL/NoSQL Airflow

PySpark Hadoop

GCP Firebase Dataproc

Git Linux

LEARNING

Deep Learning pytorch

Reinforced Learning

Audio Processing

LANGUAGES

Portuguese: **Native**

English: **Fluent**

REFERENCES

Ref 1

in Felipe de Albuquerque

Ref 2

in Fabio Valonga

Ref 3

in Fulvio Neto

ABOUT ME

Hello, I'm Luiz, a MSc in Electrical Engineering focused on Machine Learning research, currently working on the Data Engineering field on a quest to become a full-fledged specialist on the Data and Machine Learning fields. I enjoy tough challenges and thinking outside the box in order to solve them.

EXPERIENCE

Data Engineer | Data Scientist | [Dextra Consulting](#)

12/2020 – Present

Remote

- Creation of text-processing PySpark jobs for multiple client pipelines on a lakehouse architecture.
- Design and implementation of a Highly Available infrastructure of a Speech-to-Text and text-processing project using GCP (Dataproc, R-MIG, Compute Engine, Firebase, Cloud Function, Build and Run).
- Support and development of machine learning models for sentiment analysis.
- Contributed for the creation of several PySpark jobs for multiple text-processing pipelines for different clients on a lakehouse architecture.

Data Engineer | [Samsung Electronics](#)

01/2020 – 09/2020

Campinas, Brazil

- Data extraction procedure automation using a distributed architecture with Apache Airflow and Docker.
- Creation of spark jobs for data indexing and logging of metadata.
- Relational database architecture and modeling for event logging.
- General automation of procedures and ETLs using Bash, Python, and Docker.
- Development of database-interface APIs using NodeJS.

Data Scientist | [Grupo SOMA](#)

07/2019 – 12/2019

Rio de Janeiro, Brazil

- Implementation of a cluster using Kubernetes (GKE) for the orchestration of dockerized ETLs in Python.
- Creation of a scalable development platform used for several projects using Jupyter Hub hosted in a cluster with Kubernetes.
- Development of a workshop on data science, machine learning models and their applications.
- Implementation of a supervised model to predict sales of new products based on historical data and visual characteristics, with direct development on the whole machine learning chain, from data processing to serving the model through a REST API using Flask.
- Establishment of a work flow to analyze and compare machine learning models using MLFlow.

ACHIEVEMENTS



Honorable Mention
Prize awarded for the 5 finalists (of over 1000) students at the 7th Week of Academic Integration at UFRJ



Hackathon Winner
Winner of the first Hackathon hosted at UFRJ



Completed Deep Learning Specialization on Coursera

The courses included:

- Neural Networks and Deep Learning
- Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization
- Structuring Machine Learning Projects
- Convolutional Neural Networks
- Sequence Models



Published Articles

- *Medical Engineering & Physics*
- Research in Nondestructive Evaluation
- ABM Proceedings
- IFAC-PapersOnLine

Masters Scholarship | COPPETEC



03/2017 – 03/2019



Rio de Janeiro, Brazil

- Development of an autonomous system for defect propagation monitoring based on acoustic emission on rigid pipes

Academic Internship | Biomedical Engineering Program - UFRJ



2016 – 2017



Rio de Janeiro, Brazil

- Research in applied control for bio medicine, with a focus on the rehabilitation of patients with Spasticity.

EDUCATION

MSc. in Electrical Engineering | Federal University Of Rio de Janeiro



03/2017 – 04/2019



Rio de Janeiro, Brazil

- GPA: 2.88/3.0 (A)
- Study and research on applied machine learning techniques and models for a project in the Oil and Gas industry in collaboration with PETROBRAS.

BSc. in Electronics and Computer Engineering | Federal University Of Rio de Janeiro



03/2013 – 03/2019



Rio de Janeiro, Brazil

- GPA: 8.3/10.0

PROJECTS

Anime Opening Rate (WIP - On Hold)



01/2021 – Present

- Trying to define if it is possible to guess an anime's overall rate on My Anime List using only its opening song. An approach using Deep Learning and classic Signal Processing techniques.

Kubeflow ML Pipeline |



11/2020

- A hands-on project for learning about Kubeflow's ML Pipelines. Consists of a 6-staged pipeline from data ingesting all the way to model deployment.

Binary Animal Game |



11/2020

- An Object-Oriented approach to a simple guessing game where you can define yes-no questions.

RS State Procurement Data Study |



09/2020

- A study of grants and procurement of the Rio Grande do Sul state.

Energy Consumption Management System



05/2016

- Winner project of the 1st Hackathon UFRJ. Development of the software and hardware of an energy consumption management project, that remotely controls air conditioning devices, written in C++.