FELIPE HONORATO DE SOUSA

+55 83 98680-5171 - fhonoratosousa@gmail.com

Languages: Native Portuguese, Fluent English.

Github : Felipehonorato1 **Linkedin** : in/felipehonoratodesousa **Personal Site** : https://felipehonorato1.github.io

EXPERIENCE

Machine Learning Engineer - Moises   07/2022 - Present

The latest project I have been working on is Automatic Lyrics Transcription, where we could improve current SOTA methods on the task and deliver it to our users. We have improved the decoding phase as well as the training phase, by implementing ZeRo techniques to allow huge models to fit on regular GPUS. We have also conducted experiments using different audio augmentation techniques and implemented logging strategies that helped us spot our bottlenecks easier.

Machine Learning Intern - Moises   03/2021 - 07/2022

Developed an AI Songwriter assistant tool, using LLMs with proper finetuning, we could deliver features such as smart rhymes (Which according to the user's text recommended different rhymes - considering also different rhyme-strengths. Other than that, we have improved the way that people use dictionaries by sorting the outputs according to what was closer to the user input context. We have implemented other constraints to text generation such as mood and creativity. The tool has reached over 8k users and it's widely available.

Software Engineering Intern - SEFAZ   05/2020 - 06/2021

I worked on the research team. We developed a method to match the same product to different names on electronic invoices. Went through the research (Data analysis, trying some clustering techniques, checking metrics) and then implemented it at the backend. It was a powerful tool to avoid and detect fraud on electronic invoices.

EDUCATION

B.S in Computer Engineering - Universidade Federal da Paraíba - 9.12/10   05/2019 - 05/2025 (expected)

TOOLS AND INTERESTS

Tools   C, C++, Python, Javascript, Pytorch, Tensorflow, Scikit-learn, Huggingface, SQL, Git, Linux, Docker.
Interests   Software Engineering, Machine Learning, Natural Language Processing, Data science.

PROJECTS

GANdido Portinari

A GAN model that stylizes photos as if they were painted by the Brazilian artist Candido Portinari.

Real-time Mask Detection Implemented a preprocessing pipepeline, trained YOLOv5 algorithm to identify mask usage in the wild and integrated the tool with telegram BOT.

StorIA Scrapped horror stories from reddit using scrapy, then implemented a preprocessing pipeline and trained a language model (GPT-2) to collaboratively write horror stories with an user. Deployed with Heroku.

Hermes Developed with my partners a system to help people track covid cases and understand where their taxes were invested during the pandemics. With this project, we won the third place at OAB-PB Hackathon.

EXTRACURRICULAR ACTIVITIES

Counselor and Co-Founder TAIL - UFPB   08/2020 - Present

TAIL (Technology and Artificial Intelligence League) is a non-profit organization that is oriented by the ARIA LAB professors. The Academic league aim is to teach new students, produce content and contribute to AI and Data Analysis field. During this period went through data science and natural language processing departments.

PUBLISHED PAPERS

An Approach for Automatic Description of Characters for Blind People   **WebMedia 2021**

Iris-CV: Classifying Iris Flowers Is Not as Easy as You Thought   **BRACIS 2021**

RELEVANT CERTIFICATES

Sequence Models - deeplearning.ai (Cousera)   06/2021

Convolutionan Neural Networks- deeplearning.ai (Cousera)   05/2020

Neural Networks and Deep Learning- deeplearning.ai (Cousera)   12/2020

Natural Language Processing Nanodegree   03/2021