
FRANCISCO BRUNO DIAS RIBEIRO DA SILVA

EXPERIENCE

MACHINE LEARNING ENGINEER, NUBANK – AUG 2024-PRESENT

- ❖ Trained Bert based LLM and XGBoost model to enhance merchant detection, achieving 85% accuracy for transactions with identifiable end merchant (baseline with elastic search only being 64%).
- ❖ Worked with labeling team and provided guidelines to make labels to train models for merchant detection.

SOFTWARE ENGINEER, HYPERPLANE (ACQUIRED BY NUBANK) – JAN 2024-AUG 2024

- ❖ Implemented a cache and done performance optimizations on rule's system to reduce latency by 85%.
- ❖ Made a pipeline to predict a user's address based on their card transactions achieving 80% accuracy on city location.
- ❖ Developed and deployed an API to categorize transactions in realtime.
- ❖ Fixed a bug in rule categorizer system that affected 2.5% of all transactions enriched by the company

SOFTWARE DEVELOPER, ITANDROIDS – 2019-2022

- ❖ Designed and programmed a behavior for a humanoid robot to search for the ball in a football field autonomously.
- ❖ Researched and developed a method to calibrate the kinematic model of a humanoid robot using computer vision and an evolutionary algorithm ([see paper](#)).
- ❖ Trained and embedded a custom tiny YOLOv3 CNN in the robot for ball, goal posts and field marks detection ([see video](#)).

ACADEMIA

- ❖ B.E. in Aerospace Engineering at Instituto Tecnológico de Aeronáutica ([See diploma, Graduation thesis webpage](#))
- ❖ Contributed to centroid decomposition and Bellman-Ford Algorithms on USA Computing Olympiad Guide ([PR1](#), [PR2](#))
- ❖ Candidate Master on Codeforces ([profile link](#))
- ❖ Bronze medal on ICPC Brazilians's final ([trophy](#))
- ❖ Second Prize at International Mathematics Competition ([certificate](#))