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Experience

Fulltime – Hyperplane (Jan 24 – Present)

Hyperplane is a company that leverages the power of AI to improve financial systems. Bought by Nubank on July 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 enriched transactions, achieving 80% accuracy on city location.
- Developed and deployed an API to categorize transactions in real time.
- Fixed a bug in rule categorizer system that affected 2.5% of all transactions enriched by the company.

Python, SQL

Intern – Kinea (Sep 20 – Dec 20)

Kinea is an investment fund firm.

- Developed a system to automate the generation of real state rent contracts, reducing write time from ~90 min to ~10 min.

Python, SQL

Initiative – ITAndroids (Feb 19 – June 23)

ITAndroids is a team of university students that develops robots capable of playing football.

- 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.

C++, Cmake, Python, ROS2

Creator – Pong Soccer (Aug 19 – Nov 19)

Developed a football android game with 500+ installs on google play. Sadly the game is not available anymore on the play store due to lack of updates, but I found it on a third party site.

- Features different game modes (1v1, 2v2 and 4v4).
- Features tournament and league modes.
- Uses decision trees for AI behavior.

Lua, Solar2D

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).
- Expert on codeforces (profile link).
- Bronze medal on International Collegiate Programing Contest Brazilian's final (see trophy).
- Second prize at at International Mathematics Competition (certificate image).