# **GUILHERME TAVARES**

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in /-guilherme-tavares

#### **PROFILE**

Trilingual English-Spanish-Portuguese experienced professional with over 7 years of hands-on expertise in data science, machine learning, artificial intelligence, reinforcement learning, and as a Python developer. I am known for being a team player who thrives in fastpaced and high-pressure environments. Passionate about problem solving, I excel in implementing data-driven tools to enhance operational efficiency and address complex challenges. Moving forward, I am looking for a role where I can leverage my analytical knowledge to enhance the company's competitiveness project outcomes.

#### **EDUCATION**

#### Master of Science in Neuroscience and Cognition

UFABC, Brazil | 2019

#### Postgraduate Degree in Financial Risk Management

Saint Paul Business School, Brazil | 2023

## **MBA** in Quant Commodity Trading

AgroInvest, Brazil | 2025

#### Bachelor's Degree in Electrical and **Computer Engineering**

Faculty of Industrial Engineering - FEI Brazil | 2015

#### **CORE SKILLS**

- Strong Communication, Team-player
- Goal-Oriented, Bottom-up Thinking
- Technical Sales, Resourceful, Curious
- Relationship Builder, Problem-Solving
- Machine Learning and Deep Learning, R&D
- Finetuning PEFT QLoRA, Selenium, Matlab
- CI/CD, Databricks, Dataiku, SAS, EDA, R&D
- CNN, Tableau, Streamlit, LSTM, MongoDB
- PyTorch, Gitlab, GitHub, DAG, Tensorflow
- MLFlow, DVC, Lambda, FastAPI, CrewAI • Agentic AI, FAISS, Spark, Flask, Chromadb
- RAG, Forecast, Causal Inference, Airflow
- Cohort Analysis, Reinforcement Learning
- Docker, Bedrock, Python, R, SQL, Bedrock
- Snowflake, Kubernetes, LlamaIndex, PoCS
- LangChain, LangGraph, AWS Sagemaker

#### PROFESSIONAL EXPERIENCES

#### Al Research Scientist Engineer - Contractor | 10/2024 - 03/2025

Work & Co Company | New York, NY (hybrid)

- Led research and implementation of GenAl as a Judge at Pfizer Company.
- Developed LLM Eval models using HayStack integrated to assess Generators using Python, Prometheus 2, Llama, Mistral 7b, Gemini 2: Finetuning QLORA, plus Agentic RAG with a persistent local index for files powered by LangChain and accessible via MCP (model context protocol).
- MLFlow for data orchestration. RAGAS, TruthfulQA, and Giskard for detection of Hallucinations for Regulatory Compliance and AI risk mitigation.

### Sr. Al Engineer and Researcher - Seasonal | 06/2024 - Present

Neuko Health Tech Startup Company | Los Angeles, CA (remote)

- Led research and development innovation in Neuroscience, Signal Processing, Reinforcement Learning, and GenAl by integrating cutting-edge literature into productive code for a Startup project. ML engineering and API development.
- Achieved a 70% reduction in EEG channels using Sequential Backward Selection (SBS), optimizing data processing efficiency.
- Developed Azure Al Bot using Python, EEG inputs, CNNs, LLMs, Speech & Voice (STT and TTS) integrated with CLU models from Azure Language Studio, achieving 94% accuracy in multi-class BCI tasks.

#### Senior Data Scientist, Risk Management | 06/2023 - 06/2024

Nutrien Ag Solutions (World's largest agriculture inputs retail company) | Brazil

- Led a computational vision project from scratch for area distortion detection, which resulted in clearer identification and USD 7K in contract cost savings.
- Performed a risk assessment utilizing hedging strategy, historical basis, and projected exchange data, achieving an average monthly savings of 20% on product purchases.
- Implemented LLM extensions on Snowflake Cortex and Python for chatbot customization and recommendations, boosting client satisfaction by 12% and achieving a 7% increase in sales growth.
- Maintained Power BI KPI reports for procurement during a BI department layoff.

#### Data Science Specialist | 12/2021 - 04/2023

Will Bank (Digital Banking Platform) | Brazil

- Developed demand forecast models using Python and State Space Models for credit card spending, achieving an improved predictor error of less than 8% and saving USD 12K monthly through better resource allocation.
- Identified critical churn variables through statistical modeling, leading to a 6% reduction in churn rate through effective client retention strategies.

#### Senior Data Scientist | 03/2021 - 12/2021

Mercado Livre (Latin America's largest e-commerce) | Brazil

- Improved fraud detection by 20% from text messages and images, utilizing predictive models and machine learning algorithms, saving USD 80K monthly.
- Led a cross-LATAM team of data scientists and Python developers responsible for fraud detection in the marketplace, comprising groups of 4-5 members, ensuring effective project execution and fostering collaboration.
- Enhanced customer and vendor access security, reducing false positives of fraud by 15%, and saving the company USD 50K annually.

#### Artificial Intelligence Technical Leader | 12/2018 - 03/2021

Hvar (Digital Consulting Company) | Brazil

- Developed a deep learning tool for enhancing customer information for a major automotive client, achieving 84% accuracy and saving USD 10K yearly.
- Reduced client labor costs by USD 10K by developing a machine learning tool using Python for classifying phone calls based on quality criteria and facilitated the acquisition of new major contracts.
- Created a data science project to predict SKUs for a major client company, achieving less than 13% error rates, leading to annual savings of USD 60K.

#### Machine Learning Scientist | 04/2018 - 12/2018

Docket (Largest brazilian legaltech and SaaS company) | Brazil

- Integrated the company's initial Artificial Intelligence (AI) team, saving USD 20K by developing a data-driven computer model, providing comprehensive solutions for clients, and earning recognition from external companies.
- Developed a machine learning models using Python, securing partnerships, including with Google, generating over USD 70K in revenue.

<sup>\*</sup>Career Break due to educational development | 04/2016 - 03/2018