






FRANCISCO PEREIRA

Research and development

ML Engineer | Building Production AI Systems |
Transitioning from R&D to ML Infrastructure

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-  My Portfolio
-  My LinkedIn

OVERVIEW

ML Engineer building production-ready AI systems. 2 years developing and deploying ML solutions. Specialized in MLOps, model serving, and AI infrastructure. Moving from research to scalable platform engineering. Currently, in the Research and Development (R&D) sector, I am responsible for the conception and implementation of innovative and scalable solutions, specializing in AI-driven projects for the optimization of conversational capabilities and the automation of data tasks.

EXPERIENCE

- Jan 2025-Present **Research and Development Technician** GoTVee
Led implementation of advanced AI-powered virtual assistant solutions, integrating Machine Learning and NLP for accurate interpretation and response systems based on contexts.
- Jan 2024-Jan 2025 **Development Internship** GoTVee
Developed AI/LLM Proof-of-Concepts (PoCs) and Minimum Viable Products (MVPs), leveraging Python for system and interface development.
- Jul 2023-Sep 2023 **Research Fellowship at CeDRI** CeDRI, Instituto Politécnico de Bragança
Contributed to the development of a C# and OpenGL tool in Unity 3D to enhance quality assurance in automotive assembly and body shop processes in a OpenZDM project to improve defect detection mechanisms.
- Jul 2022-Jan 2023 **Research Fellowship at CeDRI** CeDRI, Instituto Politécnico de Bragança
Developed mixed reality (AR and VR) applications using Unity 3D, Frameworks and Libraries.

EDUCATION

- Oct 2019-Jul 2023 **Degree in Informatics Engineering** Instituto Politécnico de Bragança
 - Scientific Areas: Computer Science, Computer Engineering, Mathematics, Information Systems.
 - Honors: Awarded two research fellowships

LANGUAGES

Portuguese - Native
English - Proficient

HARD SKILLS

Machine Learning: Experience developing virtual assistants with API-driven and CUDA-accelerated LLM solutions using Python Libraries.
Programming: Python, C#, JavaScript, others.
Data and Analytics: SQL, NoSQL, Vector Databases.
Source Control: Git (GitHub, GitLab, BitBucket).
Platforms and Tools: Linux, Bash, Docker, CI/CD pipelines, NGINX, Unity 3D, Google Cloud Platform GCP.

SOFT SKILLS

Self-taught
Attention to detail
Technical Writing
Teamwork

PUBLICATIONS

An Augmented Reality Intelligent Guide for the Automotive Industry

Published in Learning Factories of the Future (CFL 2024) | University of Twente, Enschede, The Netherlands (Jul 2024)
- Developed a mixed reality HoloLens app using AI and computer vision to identify and display vehicle inspection zones on a production line.

- Integrated gesture-based interaction and a RESTful API for real-time database updates, enhancing efficiency and safety in smart manufacturing.

Publication Link