

# Research and development

Driving Innovation with AI & Machine Learning



Portugal

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My Portfolio

My Linkedin

# **OVERVIEW**

Informatics Engineering graduate with 3 years of proven experience in Software Development and Research, having secured two research grants at the Center for Digitalization and Intelligent Robotics.

Currently, in the Research and Development (R&D) sector, I am responsible for the conception and implementation of innovative and scalable solutions, specializing in Al-driven projects for the optimization of conversational capabilities and the automation of data tasks.

A proactive, goal-oriented professional focused on achieving impactful results.

# **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-Dec 2024 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

### HARD SKILLS

#### SOFT SKILLS

Portuguese - Native English - Proficient

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.

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**