

· DETAILS ·

Paredes, Porto, Portugal

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12/06/2000

LINKS •LinkedIn

· SOFT SKILLS ·

Analytical Thinking

**Decision Making** 

Fast Learner

Adaptability

Ability to Work Under Pressure

Ability to Work in a Team

Leadership Skills

**Excellent Communication Skills** 

Autonomy and Proactivity

Confidence

LANGUAGES

Portuguese

English

Spanish

Italian

· HOBBIES ·









• DRIVING LICENSE • B + B1

# PEDRO MORAIS

**Electrical and Computer Engineering Graduate** 

## PROFILE

Greetings, I'm Pedro Morais, on the verge of completing my Master's degree in Electrical and Computer Engineering at FEUP, specializing in automation. My passion revolves around the cutting edge of technology, with a keen interest in Electric Mobility, Artificial Intelligence, and Blockchain Technologies. With a robust analytical mindset, I aspire to leverage my skills and enthusiasm for technology to contribute meaningfully to innovative projects. I am eager to explore opportunities that align with my passion for pushing technological boundaries and making a lasting impact.

## **EXPERIENCE**

## Project Leader Telco Junior @ Proef

September 2023 — Present

In my role as a Project Leader Telco Junior in the Mobile Networks department at PROEF, I manage telecommunications projects, ensuring flawless execution from initial planning to successful delivery, monitoring all the stages of each project I am involved in. I actively contribute to resource allocation, timeline management, effective problem-solving and stakeholder management.

#### Master's Thesis - "Identification of Rail Faults using AI" @ Digi2Lab

January 2023 - October 2023

I developed and successfully defended my master's thesis "Identification of Rail Faults using AI". Within the scope of the Ferrovia 4.0 project, and in a laboratory environment at Digi2Lab, the objective of my work was to develop a functional ML model capable of accurately predicting the presence of faults on rails. To achieve this objective, several ML models were developed in an attempt to identify the most efficient approach.

The models developed were Neural Networks, Random Forests, Gradient Boost Machines and Support Vector Machines. I also used techniques like PCA and Transfer Learning. Among the libraries used are: Tensorflow, Keras, Scikit, NumPy, Pandas and MatPlotLib.

# **DUCATION**

#### **Bsc in Electrical and Computer Engineering @ FEUP**

September 2018 — July 2022

#### Msc in Electrical and Computer Engineering w/ a major in Automation @ FEUP

September 2021 - June 2024

#### Msc in Communications Engineering @ Politecnico di Torino

September 2022 — February 2023

Spent 6 amazing months in Italy on the Erasmus+ Program. Learned some more on Communication and Network Systems, Machine Learning, Networking Technologies for Connected Vehicles and also had a class on Cybersecurity.

# **# HARD SKILLS**

#### **Machine Learning and AI**

Strong understanding and practical application of ML techniques, including supervised and unsupervised learning algorithms, neural networks, and deep learning architectures, for tasks such as classification, regression, and clustering.

#### **Programming skills**

Good knowledge of programming languages such as: Python, C, C++, Java and SQL.

#### **Communication Systems**

Knowledge of the design and operation of communication systems, including wireless (IEEE 802.11x, Zigbee, LoRa, Bluetooth), wired (Ethernet, UART, CAN, LIN), and IoT protocols (MQTT).

#### Hardware Design and Implementation

Knowledge of the design and operation of electronic systems, including microcontrollers, embedded systems, Real-Time Systems and computer systems.