# CARLOS FARIA

AI/ML Engineer

## **ABOUT ME**

Master's in Electrical and Computer Engineering at FEUP (thesis defense in July 2025), specialized in Computer Vision and Machine Learning. Experienced with Transformer-based models, image classification and segmentation pipelines and real-time data processing. Background as a Business and Financial Analyst in agile environments, combining technical expertise with strong analytical and communication skills. Seeking an opportunity to contribute to engineering projects with new technologies and develop hands-on problem-solving experience.

## **TECHNICAL SKILLS**

- Extensive experience in data science workflows and object-oriented programming.
- Solid understanding of ML theory, with practical academic and personal experience in developing and tuning ML models.
- Programming Languages: Python, Rust, C, C++, CSS, HTML.
- ML & Data: Pytorch, Numpy, Pandas, Matplotlib, Scikit-learn, OpenCV, Hugging Face Transformers.
- Skilled in database creation, structuring, and advanced querying and creation using PostgreSQL and maintenance of ETL processes.
- Experienced in Git version control for collaborative software development.
- Knowledge of the ROS framework.

#### **CERTIFICATIONS**

• Scrum Fundamentals Certified (SFCTM): Awarded on August 17, 2020.

## **CONTACT ME:**

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faria-33b51291/

Github: https://github.com/cthadeufaria Location: Porto, Porto, Portugal.

#### **EXPERIENCE**

#### **BISECT LDA - AI/ML Thesis Intern**

FEB 2025 - JUN 2025, MATOSINHOS

- Developed a state-of-the-art Transformer-based deep learning model for predicting video Quality of Experience (QoE), leveraging PyTorch for training and evaluation.
- Designed and implemented a real-time inference pipeline in Rust to ensure low-latency deployment within streaming environments.

#### **FEUP - Research Assistant**

NOV 2024 - JAN 2025, PORTO

- Managed OS provisioning and wireless networking setup for a Raspberry Pi cluster, ensuring reliable set up for Industry 4.0 Cyber-Physical Systems (CPS).
- Built custom 3D-printed enclosures to support the physical deployment of the embedded cluster.

## RSB Comunicação na Imagem – Embedded Systems Intern

MAY 2024 - OCT 2024, PORTO

• Prototyped sensor-driven advertising kiosks on Raspberry Pi 5; optimized real-time Python pipelines for interactive media.

## Stone & Eventials - BI Analyst Roles

2018 - 2021, BRAZIL

- Developed Python dashboards and predictive analytics (queuing theory, churn models).
- Automated financial reporting pipelines and KPI monitoring using Python, Power BI, Google Data Studio and Metabase..
- DB querying using PostgreSQL and Google BigQuery.

#### **EDUCATION**

#### FEUP - M.Sc. Electrical & Computer Engineering

SEP 2022 - JUL 2025 / PORTO, PORTUGAL

- Thesis: "Al-driven Media Quality Monitoring System" (real-time video QoE prediction via Transformer architectures).
- Relevant Coursework and Contents: Computer Vision; Machine Learning; OOP programming; Large Language Models, Perception and Mapping, Nonlinear Control Systems.

#### Fundação Getúlio Vargas - MBA Finance

APR 2018 - NOV 2020 / RIO DE JANEIRO, BRAZIL

- Financial Risk Modeling and Forecasting.
- Corporate Finance; Financial Derivatives; Risk Management.

## **CEFET-RJ - B.Eng. Mechatronics & Automation Engineering**

MAR 2011 - JUN 2016 / RIO DE JANEIRO, BRAZIL

- Final Project: Temperature control through PID tuning and Pulsewidth modulation.
- Core Modules: Linear Control Systems; Embedded Systems; Industrial Communication Protocols.