

Duarte Cardoso

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EDUCATION

Faculty of Engineering, University of Porto (FEUP)

Porto, Portugal

Master's in Software Engineering (17.8/20 current GPA)

Sep 2024 – Jun 2026

- **Master's Thesis:** Product Validation Accelerator Engine — A test generation engine for highly configurable insurance products using multi-agent systems and traditional software methods.

Polytechnic of Porto - School of Engineering (ISEP)

Porto, Portugal

Bachelor's in Informatics and Computing Engineering (14/20 GPA)

Sep 2021 – Sep 2024

- Member of **NEI** (Núcleo de Estudantes de Informática), serving in the **Communication Department** before being promoted to **Vice President**, managing a team of about 40 members and leading various technology events and student-company interactions.

EXPERIENCE

AI Engineer

Aug 2024 – Present

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Porto, Portugal

- Co-developed a **RAG and Agentic RAG pipeline** powering a domain-specific AI assistant for accurate, context-aware responses based on internal documentation.
- Designed and implemented the **Modelling Assistant**, a **multi-agent system** integrated into the company's configuration engine used to explore and perform changes on product configuration.
- Designed and implemented **Configure:it**, a tool that accelerates document processing for insurance tarification and product specification documents and automatically imports structured data based on document content.

Software Engineer

Jun 2023 – Aug 2024

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Porto, Portugal

- Worked as a Full-stack Engineer in a cross-functional, international team developing a **new insurance product** for a North American client through the **full lifecycle** using **Java Spring**, **Backbone.js**, and **PostgreSQL**.
- Contributed to **successful go-live** of the product, which is currently in production with a **very low defect rate**.

Software Engineering Intern

Feb 2023 – Jun 2023

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Porto, Portugal

- Contributed to the development of a full end-to-end insurance product proof of concept, working primarily on backend and core business logic.
- Implemented complex workflows using **Camunda (BPMN and DMN)**, integrating them seamlessly with **Java** services to orchestrate business processes and decision logic.

Chess Coach

Jun 2022 – Jun 2023

Focus Chess

Remote

- Conducted remote English-spoken online chess classes for students from Canada and the United States at beginner to intermediate levels.

PROJECTS

Eunomia | *Django, Scikit-learn, LangChain, React, PostgreSQL, Docker, FastAPI*

Aug 2025 – Present

- Co-founded and developing a **self-organization application** that tracks daily metrics and personal data.
- Implemented **ML/AI agents** using **LangChain** and **Scikit-learn** for intelligent insights and recommendations based on user behavior.
- Built configurable and comprehensive **data visualization dashboards** to help users understand their productivity patterns.

Article Explainer with Swarm Architecture | *Python, LangChain, Multi-Agent Systems*

Sep 2025 – Oct 2025

- Created an article explanation system using the **Swarm** multi-agent architecture pattern.
- **Featured twice by LangChain on LinkedIn** as an exemplary implementation of Swarm architecture in multi-agent systems.

ScalerPath | *React, Django, Redis, Python*

Feb 2025 – Jun 2025

- Served as **CTO**, leading the development team for an **e-commerce platform** from inception to launch.
- Acted as first line of contact with the client and presented the application pitch at a FEUP startup event.

NewsTailor | *Python, React, GitHub Actions*

Sep 2024 – Dec 2024

- Full-stack web application providing personalized news tailored to user interests.
- Integrated **AI-powered summarization and data collection** to filter and present relevant news articles.

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, TypeScript, SQL, HTML5, CSS

AI/ML Frameworks: LangChain, LangGraph, LangFuse, LangSmith, Scikit-learn, PyTorch, Pydantic

Libraries/Frameworks: React, FastAPI, Django, Spring, Spring Boot, Backbone.js, Streamlit, PostgreSQL, Camunda

DevOps & Tools: Docker, Jenkins, GitHub Actions, CI/CD, Git, GitHub, GitLab, Jira, Trello, Postman