

Maria Duarte

SOFTWARE ENGINEER

Dublin, Ireland · Lisbon, Portugal

☎ (+351) 917912912, (+353) 83 397 7308 | ✉ maria.j.duarte@tecnico.ulisboa.pt | 🏠 mariajmduarte.github.io | 🌐 maria-j-duarte

Summary

I am currently completing an internship at Dremio, where I work on a top-performing query engine. As I have the opportunity to live in Dublin, I am seeking a role there where I can continue to challenge myself and take more responsibility. I am very passionate about data and query optimization, but I am also open to other technical challenges. I am motivated, hardworking, focused, and deeply enjoy logical and analytical thinking.

Work Experience

Dremio

Lisbon, Portugal

SOFTWARE ENGINEER INTERN - BACK-END

Aug. 2025 - Feb. 2026

- Removed unnecessary materialization overhead triggered by **66%** of DML statements.
- Fixed bugs in Dremio's materialized views and cost-based relational query optimization system.
- Corrected materialization metrics and exposed new information via the REST API and the database.
- Created unit, integration, and query acceleration verification tests.
- Presented demos of self-developed improvements to the entire company.
- **Tech Stack:** Java, SQL, gRPC

Link Consulting

Lisbon, Portugal

SOFTWARE ENGINEER - BACK-END

Feb. 2024 - Jan. 2025

- Fully designed and implemented a data retrieval feature using SQL-based queries, replacing an inefficient graphic querying system. This improved **query execution performance** by **96%**.
- Contributed to the development of key features in an Enterprise Architecture platform, greatly improving the user experience for major governmental organizations in Portugal.
- Worked in an Agile environment and independently managed tasks and development priorities.
- **Tech Stack:** Java, Spring, MySQL

Link Consulting

Lisbon, Portugal

SOFTWARE ENGINEER INTERN - BUSINESS ANALYST

Sep. 2023 - Feb. 2024

- Worked as an **IT Business Analyst** for a leading governmental organization in Portugal, designing strategic views of IT systems to identify bottlenecks and support business improvement.
- Created a generalized metamodel to simplify the integration and import of client data across business, data, application, and technology domains.
- **Certificates:** TOGAF (The Open Group Architecture Framework)

Education

Instituto Superior Técnico (IST)

Lisbon, Portugal

MSC IN COMPUTER SCIENCE AND ENGINEERING

Sep. 2022 - May. 2025

- With focus on Information Systems and Artificial Intelligence.

Instituto Superior Técnico (IST)

Lisbon, Portugal

BSC IN COMPUTER SCIENCE AND ENGINEERING

Sep. 2018 - Jul. 2022

- **Project of interest:** Implemented a new feature for a large quiz platform using Java, Spring, and Vue.js.

Skills

Technologies Spring, FastAPI, MySQL, PostgreSQL, Vue.js, HTML, Git

Programming Languages Java, Python, SQL

Speaking Languages English (B2), Portuguese (C2)

Personal Projects

Web application for managing albums and artists, built with Python, FastAPI, and PostgreSQL.