

# 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.