Rui Gonçalves

+351 91 510 94 44 | rui_21_99@hotmail.com

in Rui Gonçalves | ⊙ jordan21pt

Braga, Portugal

OBJECTIVE

Recent **Computer Science graduate** from the **University of Minho** with one year of professional experience in modernizing a legacy POS system from **C** and **SQLite** to a new architecture using **C++**, **Qt/QML**, and **MongoDB**. Currently pursuing a **Master's degree in Computer Engineering** at the **Polytechnic University of Cávado and Ave**, focusing on **data engineering and backend technologies** including **PySpark**, **Databricks**, **Node.js**, **TypeScript**, and **cloud platforms**. Seeking my first professional role as a **Data Engineer** to apply hands-on experience with data pipelines, ETL/ELT, and analytics solutions in a dynamic environment.

EXPERIENCE

- **SDILAB [🌐]**   *Sep 2024 - Present*
  Software Developer   Braga, Portugal
  - Developed new features, using C++ and Qt framework.
  - Collaborated with stakeholders to gather technical requirements and translate them into implementable solutions.
  - Created Python scripts to generate mock data for database testing and validation.
  - Created a C++/Qt script that checks for differences between the defined database schema and the live database schema.
  - Created the logic for multi level transactions using mongocxx (C++ driver).
  - Built a C++/Qt utility that compares two MongoDB databases and automatically synchronizes missing or updated documents between them.

- **Fnac Braga [🌐]**   *Jul 2021 - Nov 2023*
  Retail assistant   Braga, Portugal
  - Delivered exceptional customer service and built lasting client relationships through effective communication.
  - Performed store operations, including cash register management, inventory organization, and product restocking.
  - Managed high-volume interactions with empathy and professionalism, resolving customer issues efficiently.
  - Worked collaboratively with teammates to improve daily workflows and customer satisfaction.

PROJECTS

- **Advanced Databases Project**   *Dez. 2025 – Jan. 2026*
  IPCA
  - **TP1 – Database Benchmarking:** Conducted comparative performance analysis across **MySQL**, **MongoDB**, and **Neo4j** for e-commerce analytics, modeling schemas, analyzing 2.5M+ records, and justifying technology selection based on benchmarking results.
  - **TP2 – Lakehouse Implementation:** Built an end-to-end data pipeline in **Databricks** using **PySpark** ands **SQL** and the Medallion Architecture (Bronze/Silver/Gold); Designed a galaxy schema with three fact tables and shared dimensions; Delivered a **Power BI** dashboard with 170M+ revenue analytics across 80+ countries.

TECHONOLOGIC STACK

- **Languages & Frameworks**
  C, C++, Python, JavaScript, TypeScript, Node.js, Qt/QML, HTML, CSS
- **Databases**
  MongoDB, MySQL, SQLite
- **Tools & Platforms**
  Docker, Kubernetes, Git, GitHub Actions, RESTful APIs

EDUCATION

- **Polytechnic University of Cávado and Ave**   *Sep 2025 - Present*
  Msc. in Computer Engineering   Barcelos, Portugal
- **University of Minho**   *Graduated Jul 2023*
  Bsc. in Computer Science   Braga, Portugal

LANGUAGES

Portuguese	Native
English	Fluent
Spanish	Fluent