



Francisco Samagaio

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Work Experience

Junior Data Analyst - Natixis in Portugal

December 2024 - Current

- Responsible for data extraction, transformation, and reporting within the Financing Data team, working on a data lake that mirrors the Oracle-based financing system.
- Develop custom reports using EasyMorph for data manipulation, addressing requests from shareholders and business stakeholders.
- Maintain and optimize SQL queries used across ~300 reports, ensuring high performance, data accuracy, and alignment with business needs.
- Oversee the design, development, maintenance, and validation of 30+ database tables, ensuring data integrity throughout the pipeline.
- Contribute to a migration project, transitioning ~80 reports from IBM Cognos to EasyMorph and the data lake environment, rewriting complex SQL logic for compatibility and improved efficiency.
- Built strong expertise in data engineering, ETL design, and cross-functional collaboration within a regulated financial environment.

Intern Developer Professional Internship - Natixis in Portugal

December 2023 - December 2024

- Developed a project to transition an application from PowerShell to Python, contributing to architecture redesign, technology selection, and feature implementation.
- Created Python scripts using Pandas and NumPy to automate data extraction and transformation from around 150 files in various formats (CSV, Excel, TXT, JSON), with each script handling multiple input files. This automation enabled seamless integration with reporting pipelines.
- Used Git and Jenkins for version control and to support continuous integration and deployment throughout the development lifecycle.
- Contributed to COBOL program development and analysis in a mainframe environment, working with JCL, CICS, and batch processing for financial data processing and job automation.

Intern Developer Academic Internship - Fraunhofer Portugal AICOS

February 2023 - July 2023

- Developed my master's dissertation on generative AI for automating color generation in ceramic product design, in partnership with Fraunhofer Portugal.
- Fine-tuned existing models and proposed a new approach based on the two most widely used image generation architectures.
- Worked with HPC environments, Linux, Python, PyTorch, and Jupyter Notebooks.
- Evaluated model outputs using specific visual quality metrics and questionnaires, contributing to AI adoption in the creative manufacturing.

Technical Skills

SQL, Python – Pandas; NumPy; PyTorch; Scikit-learn
Git, Jenkins, Bash, Jira
C, C++, PHP, HTML, COBOL, JCL, Mainframe

Education

Faculty of Engineering of the University of Porto – Master s Degree in Electrical and Computer Engineering
University of Genoa Italy – Erasmus+ Study Program

2018 - 2023
2022

Languages

Portuguese – Native; **English** – Fluent; **Spanish** – Intermediate; **French** – Currently learning