## MIGUEL FERREIRA DA SILVA

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## **WORK EXPERIENCE**

NOKIA, Lisbon – Portugal

Data & Analytics - Data Scientist Lisbon - Portugal

Sept 2022 - Current

- In charge of creating & enhancing complex supply chain data business objects (Spark SQL) that can be used by business to facilitate end-to-end reporting, transforming their business requests to data engineering solutions
- Designing and implementing critical supply chain KPIs (milestones) for operational reporting
- Utilizing **PySpark RDDs** and **DataFrames** for automation & data manipulations in **Databricks** environment.
- Developed an advanced text generation Large Language Model (**LLM**), integrating metadata from data objects for facilitated information retrieval. Coded in **Databricks** workspace, using **MLflow, transformers. ETL** with **Spark.**
- Scaled file comparator to compare tables across multiple servers, streamlined UAT with precise mismatch diagnostics & integrated with Azure DevOps for Continuous Integration and Continuous Deployment (CI/CD)
- Azure Cloud Machine Learning studio: Predicting On-Time Delivery of Supply Chain Products, stacked ML model
- Migrated data pipelines from on-premises DB to Azure SQL DB; implemented solutions using Azure Data Factory
- Automated extraction, processing, and ingestion of Celonis audit logs **API** data into data pools using **Python**. Developed star schema, associated tables (**SQL**), & dashboard.

## **EDUCATION**

**Católica Lisbon School of Business and Economics, Lisbon – Portugal**Sept 2021 – July 2023 *Masters in Business Analytics – Specialization in Data Science - GPA: 17/20* 

• Python, DB Management (SQL), Big Data Technologies (Hadoop, Spark, Hive)

Thesis: Deep Learning for Melanoma Classification: A Study Using Skin Lesion Images - 19/20

- MAR-MELA-CNN Fusion Ensemble trained on MAR-MELA dataset containing 8000 Melanoma images.
- Introduced the  $F\beta$  Score for melanoma detection, minimizing false negatives in critical diagnoses.
- Scaled model for real-time inference, delivering instant melanoma diagnosis via SMS from mobile photos.

Nova School of Business and Economics, Lisbon - Portugal

Sept 2017 - June 2021

Bachelors Economics & Data Analytics

European School of Luxembourg I

Sept 2005 - June 2017

European Baccalaureate - Multilingual education in Portuguese and English, French as complementary language.

## **SKILLS**

- Languages: Portuguese (C2), English (C2), French (C1), Spanish (B1), German (A1 Learning)
- Programming Languages: Python, PySpark, R, SQL
- Machine Learning / Deep Learning: scikit-learn, TensorFlow, Keras, Natural Language Processing: transformers, huggingface, datasets, MLflow
- Data Analysis: Pandas, NumPy, SciPy, Matplotlib, SeaBorn
- Data Engineering: Git, Databricks, Azure Data Lake, Azure SQL DB, Azure Data Factory, ETL/ELT pipelines
- Platforms: Azure, Azure Machine learning Studio, Azure DevOps, SSMS, Oracle, Databricks, SAP S4/Hana
- Certifications: AZ-900: Azure Fundamentals Certificate / DP-100: Azure Data Scientist Associate / Celonis
  (8) / DeepLearning.ai: Generative AI with Large Language Models, Finetuning Large Language Models,