

João Fialho Rodrigues

Senior Data Engineer | Technical Lead & Product Owner

Lisbon, Portugal | joao.fialhorodrigues@gmail.com

linkedin.com/in/joahfrodrigues | github.com/joahfrodrigues | joahfrodrigues.com

Profile

Technical leader with 5+ years of experience scaling teams, managing product roadmaps, and delivering cloud-native data pipelines. Combined domain expertise in regulated banking and automotive industry with a proven track record of growing feature teams, driving technical recruitment, and aligning engineering execution with strategic business milestones.

Core Competencies & Technical Skills

- **Leadership:** Team Scaling, Technical Recruiting, Mentorship, Agile/Scrum, Roadmap & Backlog Ownership.
- **Engineering & Architecture:** Cloud-Native (AWS), Microservices, Modular IaC (Terraform), CI/CD Automation, APIs.
- **Data & AI:** Apache Iceberg, PySpark, AWS (ECS, Glue, Lambda, Kinesis, S3), SQL, Python, AI agents enabling AI native teams.

Experience

Critical Techworks - BMW Group 2021 – Present
Lisbon, Portugal

Senior Data Engineer & Product Owner Jul 2025 – Present

- **Product & Technical Strategy:** Led product planning alongside BMW stakeholders, translating business requirements into clear engineering deliverables and defining the architectural path for new API-first data surfaces.
- **AI & Workflow Optimization:** Mentored engineers on code quality and spearheaded the integration of AI Agents into daily workflows, automating technical documentation and accelerating technical debt remediation.

Senior Data Engineer & Scrum Master May 2024 – Jul 2025

- **Scaling Teams:** Scaled the product teams from 1 to 3 cross-functional Feature Teams by implementing the Large-Scale Scrum (LeSS) framework.
- **Recruitment & Upskilling:** Led technical interviews for Data Engineering hires, standardized the onboarding process, and upskilled the organization by lecturing internal Academy modules on DevOps, CI/CD, and GenAI.

Data Engineer May 2021 – May 2024

- **Cloud Architecture:** Engineered the migration of decades of legacy data to an AWS Streaming Lakehouse (ECS, Glue, Kinesis, Iceberg), maximizing infrastructure reuse via Terraform and significantly reducing costs.

BNP Paribas 2019 – 2021
Data Engineer / Data Analyst *Lisbon, Portugal*

- **Regulatory Compliance:** Engineered ETL data pipelines in a strictly regulated banking environment, ensuring total compliance with European Banking Authority (EBA) Stress Testing frameworks.
- **Stakeholder Delivery:** Processed large-scale risk datasets using PySpark/Hive and built automated tracking dashboards to communicate critical compliance KPIs directly to executive stakeholders.

Education

Instituto Superior Técnico 2014 – 2019
M.Sc. Electrical and Computer Engineering (Grade: 16/20)
International Exchange: Université Catholique de Louvain (Erasmus) and Télécom ParisTech (ATHENS)

Projects & Certifications

- **Acultura-te (*aculturate.pt*):** Built an AI-native cultural platform with spec-driven development for automated ingestion and semantic search of Portuguese cultural events.
- **Certifications:** Professional Scrum Master I & II (PSM I/II); Neural Networks & Deep Learning; Azure Data.