Cosimo Lovascio

ABOUT

Senior Data Engineer with over seven years of experience in designing and developing innovative software solutions, complex ETL processes, and scalable architectures in cloud environments, with a focus on code quality, data integrity, and performance optimization.

WORK EXPERIENCE

DATA ENGINEER

Agile Lab, Full Remote — *Jun 2018 – Present*

Project & Delivery Lead

- Cloud Data Platform Engineering - Defined procedural and architectural standards for the customer's cloud data platform on Azure Synapse Analytics, addressing EDWH data modeling challenges, implementing Power BI reporting, and building Databricks PySpark pipelines.
- Managed a team that grew from 3 to 10 members, fostering collaboration, skill development, and high-quality results.

Project Lead & Data Mesh Architect

- Batch Processes for Electrical Calculation - Designed and implemented multi-tenant Spark workflows on Amazon EMR for national-scale electrical calculations (Power Flow, Short Circuit), ensuring high performance and reliability.
- Data Migration Solution – Designed and developed Spark-based migration processes on Amazon EMR to integrate Distribution System Operator data into a Data Mesh platform, improving accessibility and governance.
- ETL Batch Processing – Led the end-to-end design and delivery of Spark ETL pipelines extracting and aggregating data from S3 and SAP HANA (via HTTP), leveraging a microservices-based data platform built with Java Spring Boot.

Spark Batch Developer

- Data Platform Engineering – Development of a Data Mesh–oriented platform based on Domain-Driven Design principles, with a strong emphasis on DevOps practices, API-driven architecture, and clear data ownership. Development of the Scala SDK to standardize data exposure and integrate with Spark batch and streaming workloads.
- Processing Framework Development - Designed and developed data processing framework, on top of Apache Spark, for efficient data ingestion and output to HBase and HDFS within a Cloudera environment. The core libraries were implemented in Scala, following the functional programming principles.

SOFTWARE DEVELOPER

Be20 Innovation SRLS, Bitonto — *Jul 2016 - Nov 2017*

- Designed and developed a dematerialization system using OCR technologies at the Petruzzelli Theater in Bari.
- Designed and developed the ASL Napoli competitions management system.
- Android and Web development.

SKILLS

Hard Skills

- Python / Scala
- Apache Spark
- Azure Synapse Analytics
- Databricks
- Platform Engineering

Soft Skills

- Project Leadership
- Empathy
- Autonomy

Languages

- Italian
- English

EDUCATION

- Master Degree in Computer Science, *University of Bari*, 2015-2018
- Bachelor Degree in Software Engineering, *University of Bari*, 2012-2015