

## Big Data & Cloud Architect

### Summary

Senior Software & Data Engineer (Associate Director) with deep expertise in cloud-native big-data and AI platforms, DevOps/MLOps, and large-scale platform automation. I design and deliver resilient, secure data solutions—most recently at UBS, where I built CI/CD and Databricks workflows for AI-driven compliance-risk models and cut Azure spend by 20 %. At Amadeus I oversaw three teams running a 10-PB Azure data platform that processes more than eight billion daily transactions and founded HexaMLOps to industrialise Kubeflow and AzureML pipelines. Earlier, I led the migration of 120+ legacy applications to Azure, optimised AKS clusters, and built real-time Kafka-Spark pipelines handling one billion daily transactions. Passionate about translating business strategy into data-driven, AI-powered solutions that create measurable impact at scale

### Education

- 2015-2018 **ENSEEIH**T, *Master in Computer Science – Major in High Performance Computing & Big Data*, Toulouse, France
- 2012-2014 **Undergrade studies in Mathematics & Physics**, *MPSI-MP\**, Fez, Morocco

### Experience

- September 2024 – Present **Senior Software & Data Engineer - Cloud & Big Data - UBS Switzerland**
- Within UBS' Group Compliance, Regulatory and Governance, my role is to build data-driven solutions for non-financial risk management.
  - Designed & maintained CI/CD pipelines for a fraud detection models using Azure DevOps.
  - Developed internal tools supporting FinOps efforts, leading to around **20 %** cost savings.
  - Built Databricks workflows to track key performance indicators for AI-based compliance-risk models.
  - Tools & Technologies:** Python, pandas, pyspark, Databricks, Docker, Automation Account, FunctionApp.
- September 2023 – September 2024 **Big Data Cloud Architect - Amadeus IT Group**
- Oversaw 3 teams delivering big data platforms in Azure and AWS, including a data platform in Azure processing over **8 billion** transactions per day, orchestrating **120+** Spark jobs with **10,000 daily executions**, and managing **10 petabytes** of data.
  - Drove MLOps adoption and founding **the HexaMLOps open-source** and orchestrating Kubeflow pipelines to deliver highly scalable, automated model serving.
  - Implemented observability pipelines using Kafka & Databricks, improving system reliability.
  - Tools & Technologies:** Kafka, Kafka-Connectors, Mlops, Kubeflow, AzureML, Databricks, Spark.
- April 2023 – September 2023 **Acting Team Manager - Amadeus IT Group**
- Managed team of **10** engineers during leadership transition.
  - Coordinated multi-team cloud migration & MLOps projects.
  - Ensured on-time delivery of key deliverables and sustained team productivity.
- January 2021 – April 2023 **Technical Product Owner - Amadeus IT Group**
- Led the migration of **120+** legacy applications to Azure, covering over **8 billion transactions per day**.
  - Designed & delivered secure data transfer workflows to the cloud, ensuring continuity and compliance.
  - Facilitated the work of Data Stewards by standardizing data pipelines and simplifying team's governance.
  - Collaborated cross-functionally to deliver all migration phases on time and within scope.
  - Tools:** Azure, Jira, Confluence, Agile SAFe, Mural.
- October 2018 – April 2023 **Senior Big Data Engineer - Amadeus IT Group**
- Built and maintained real-time pipelines for **1B+** daily transactions across **100+ apps**.
  - Migrated Spark workloads to Databricks, orchestrated via Airflow.
  - Developed custom Kafka Connectors (Kafka2Blob, Kafka2ELK, etc.).
  - Delivered Spark-based KPIs & monitoring apps, improving platform observability.
  - Tools & Technologies:** Kafka, K-Streams, K-Connect, Spark, Scala, Java, Elasticsearch, Python, Kubernetes, Hadoop, Hive.

### Technical skills

- Certifications: Certified SAFe® 5 Practitioner, Certified Agile® Scrum Master, Certified SAFe® 5 Product Owner.
- Languages: Java, Python, Scala, Bash, PowerShell.
- Spoken: **English** : Bilingual **Arabic**: Native speaker - **French** : Bilingual - **Japanese**: Beginner