

# Omar Qaous

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## Data Engineer

Enthusiastic Data Engineer with 2 years of experience designing, developing, and maintaining data pipelines ensuring efficient data processing and analytics for informed decision-making. Well-versed with different data models helping in transforming data and processes into actionable insights and user-friendly visualizations. Skilled using python, Django, Hadoop, CQRS, MySQL and PowerBI.

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- Data Modeling • ETL (Extract Transform Load) • Data Architecture Patterns • Microservices • Design Patterns • Object Oriented Programming • Data Quality and Cleaning • Service Oriented Architecture

**Languages:** Python, Java, JavaScript, R

**Web:** HTML5, CSS3

**Web Services:** RESTful, SOAP Web Services

**Web/App Servers:** Apache, Amazon

**Frameworks:** Django, SpringBoot, SpringCloud

**Databases:** MySQL, SQL SERVER, MongoDB, Oracle, Casandra

**Design Patterns:** MVC, Singleton, Factory, Observer, Microservices Architecture, Layered Architecture Pattern, SOA, CQRS (Command Query Responsibility Segregation)

**SDLC:** SCRUM

**Tools:** Anaconda, Eclipse, Maven, Git, GitHub, Power BI, Talend,

**Platforms:** Windows, Linux

**Big Data:** Hadoop, Spark

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## PROFESSIONAL EXPERIENCE

**CAREER NOTE:** Completed on-campus studies and currently taking distance education courses to complete a **master's degree in computer science** (Available for full-time, W-2 employment).

**Alten , Fez, Morocco • 03/2021 – 04/2023**

Engineering and IT Services

**Data Quality Analyst for the client Bouygues Telecom 07/2021 – 04/2023**

- Data Quality Assurance: Implement and maintain data quality checks, rules, and standards to ensure the accuracy, consistency, and completeness of our data.
- Data Validation: Develop Python scripts to perform data validation, identify anomalies, and execute data cleansing processes.
- Anomaly Detection: Utilize Python libraries and tools to identify data anomalies and outliers, investigate root causes, and recommend corrective actions.
- Data Profiling: Conduct data profiling activities to assess data quality issues, evaluate data distributions, and create data quality reports.
- Data Transformation: Collaborate with data engineering teams to create Python-based data transformation scripts, ensuring the accuracy of data transformations and migrations.
- Documentation: Maintain detailed documentation of data quality procedures, processes, and scripts for reference and future improvements.
- Continuous Improvement: Stay current with data quality best practices, emerging technologies, and industry trends. Proactively identify and recommend improvements to data quality processes.

**Technologies Used:** Python, Pandas, NumPy, Matplotlib, PowerBi, ArcGIS NetDesigner, Oracle, SQL/PL SQL, XML.

## ACADEMIC PROJECTS

- **Project: Real-Time Data Analysis Pipeline for High-Volume Data Streams Using Apache Kafka and Python (07/2023)**
  - Data Ingestion: Implement a Kafka consumer using Python to subscribe to Kafka topics and retrieve streaming data.
  - Data Transformation: Apply data cleaning, filtering, and normalization techniques to prepare the data for analysis.
  - Real-Time Analysis: Employ Python data analysis libraries, such as pandas, NumPy, and scikit-learn, to perform real-time analysis on the transformed data.
  - Visualization: Generate real-time visualizations, such as dashboards and charts, to present the analysis results effectively.
  - Tools: Python, Kafka, Pandas, NumPy, Spark, Matplotlib
  
- **Project: Distributed E-Commerce Platform with Spring Boot and Spring Cloud (09/2023)**
  - This project aims to develop a distributed e-commerce platform using Spring Boot and Spring Cloud. The platform will handle various aspects of e-commerce, including product management, order processing, inventory management, and customer relationship management. Spring Boot will be used to simplify the development of microservices, while Spring Cloud will provide a suite of tools for building cloud-native applications.
  - Tools: Spring Boot, React, Spring Cloud, Docker, Kubernetes, PostgreSQL

## **EDUCATION**

### **Master in computer science**

*(In progress via distance education; expected completion 12/2025)*

Maharishi International University, Fairfield, Iowa

### **Specialized Master in IoT: Software and Analytics**

ENSIAS UM5, Rabat (06/2021)

### **Bachelor in Mathematical and Computer Sciences**

USMBA FSDM, Fez, Fez Saiss (06/2019)