Hocine Makhlouf – Data Analytics Engineer

LinkedIn: https://www.linkedin.com/in/hmakhlouf/
GitHub: https://github.com/hmakhlouf
Email: hocine2makhlouf@gmail.com
Phone: (346)714-8500

- Experience in manipulating, Analyzing, and visualizing large data sets using SQL, Python, R and Tableau.
- Experience in Working with JavaScript, HTML, CSS, and Bootstrap to create Dashboards and Front-End Web Visualizations.
- Experience in SQL Queries to extract data from data tables, creating Tables, sub-queries, Joins, Views, Indexes, SQL Functions, Set Operators, and Functionalities.
- Proficient in using data transformation services, including Amazon Glue, Elastic Map Reduce - EMR, and Kinesis.
- Experience in architecting end-to-end data pipelines using Spark Scala, PySpark, SQL, and Amazon EMR.
- Skilled in utilizing storage solutions such as Amazon S3, EBS, and EFS, as well as managing relational and non-relational data stores such as Amazon Relational Database Service, DynamoDB, and Redshift.
- Experience in working with Scaled Agile Framework (SAFe) Teams for Daily Stand Ups, Product grooming, Iteration Planning, Iteration Review, and Iteration Retrospectives.
- Strong analytical, logical, Communication and problem-solving skills and ability to quickly adapt to new technologies by self-learning.

AREAS OF EXPERTISE

- **Core Skills:** Data Engineering, Spark Scala, PySpark, AWS and Data Analytics.
- **Programming Languages and Scripting:** Python, R, Scala, SQL, HTML/CSS, JavaScript, Linux.
- **Languages:** Arabic (Fluent), English (Fluent), French (Fluent).

EDUCATION

- **Bachelor of Science** in Applied Statistics
- **Associate of Applied Science** in Data Technology
- **Certificate** in Data Management
- **Boot Camp Certificate** in Data Analytics and Visualization

CERTIFICATIONS

- AWS Certified Cloud Practitioner 02/2025
- NDG Linux Unhatched

WORK HISTORY

ProjectPro.com   **January 2023 - Present**
Personal Data Analytics Engineer Projects
Working on different projects to keep myself updated with the latest data Analytics engineering architectures and technologies
Project 1 : Orchestrate Redshift ETL using AWS Glue and Step Functions
Project 2 : Build ETL Pipeline with DBT, Snowflake and Airflow
Project 3 : Build an ETL Data Pipeline on AWS EMR Cluster

Amazon   **August 2023 - Present**
Fulfillment Center Warehouse Associate
- Receive and put away inventory; Get customer orders ready and pack them up
- Load boxes into trucks for shipment; Use scanners to read bar codes on products
- View prompts on screens and follow the direction for some tasks
- Troubleshoot problems; Ensure product meets quality requirements
- Operate power industrial trucks (PIT) such as a forklift or pallet driver, and work at heights up to 35 feet.

Verizon   **July 2022 - January 2023**
Cognizant Data Engineer Consultant for Verizon
- Utilized Apache Spark distributed framework along with Scala, SparkSQL, CI/CD tools to design, implement and maintain ETL pipeline application that is used to collect, process, store data in data warehouse system.

- Built, tested, and maintained a Spark Scala Application, and codes deployments in different environments using CI/CD - Jenkins and Airflow, GitLab, IntelliJ, SourceTree, DBeaver.
- used Amazon EMR to analyze logs and to identify errors and performance issues
- Wrote complex SQL queries to create test cases framework and conduct database testing used to identified, analyzed data discrepancies and data quality issues and worked to ensure data consistency and integrity.
- Participated in daily meetings to discuss and solve issues and working in a Scaled Agile Framework (SAFe) for product grooming, user stories, and daily stand-ups.
- Worked on-premises with Spark Scala, Spark SQL, Spark RDD, Spark DataFrame, HDFS, Hive, and JDBC, and handling big data tasks like ETL and data warehousing.
- Worked on cloud platforms with AWS EMR, AWS S3, Data Pipeline, and RDS (PostgreSQL).

Cognizant   **April 2022- July 2022**
Data Analytics Engineer
During my time in the Cognizant internal data engineering training program, I was trained and gained hands-on experience in several languages and frameworks, including:
- **Programming languages** Python, Scala, Linux, SQL, and PostgreSQL
- **CI/CD Tools** with Git, GitLab, SourceTree, Jenkins and Airflow
- **Working on-premises** Apache Hadoop, HDFS, Hive, HQL, Apache Spark, PySpark, Spark RDD, Spark DataFrame, Spark Streaming, Spark SQL, Apache Kafka, Apache Yarn, Apache Sqoop, Presto, JDBC, Spark Scaling, and Spark Optimization
- **Working with big data technologies** ETL, data warehousing, data lakes, CSV, JSON, AVRO, PARQUET, and ORC
- **Working on cloud platforms** Databricks, AWS S3, Redshift, Redshift Spectrum, Glue, Data Lake Formation, Athena, Kafka MSK, Kinesis, SNS, SQS, AWS IoT, Lambda, Data Pipeline, RDS (PostgreSQL) and Snowflake.

Per Scholas   **October 2021 – February 2022**
AWS Re/start Trainee
Completed full-time, skills development and training program on IT fundamentals, AWS Cloud, and professional skills.
- Built IT fundamental skills, including working knowledge of Linux OS, writing scripts in Python and Shell.
- Learned how to apply core AWS services in the areas of computing, storage, and networking, including EC2, S3, IAM, VPC, Lambda, Cloud Formation, RDS, and Route 53.
- Worked seamlessly in multiple flavors of OS such as Windows/Linux.
- Demonstrated strong verbal and written communication skills, including the ability to explain technical information and terminology to non-technical end users.

MedTourEasy   **February 2021- March 2021**
Data Analyst Intern
- Utilized ETL methodology for supporting data extraction, transformations and loading processing in Python.
- Performed exploratory data analysis Using Python.
- Created informative dashboards using Tableau.
- Conducted detailed statistical analysis and evaluations; completed weekly reports and presented findings my manager.

Amazon Flex Houston   **February 2020 - December 2020**
Logistics Associate
- Ensured timely delivery of packages to customers while following all safety protocols and driving regulations.
- Utilized the Amazon Flex app to manage delivery schedules, routes, and customer information.
- Maintained accurate delivery records and communicating with customers and support teams as necessary.
- Managed vehicle maintenance and upkeep to ensure safe and efficient deliveries.

Trilogy & Rice University Boot Camp   **January 2019 – August 2019**
Data Analytics Trainee
- Experience in utilizing Tableau in generating visual reports with bars, lines, pies, scatter plots, heat maps, bubbles according to the end user requirements.
- Utilized ETL procedures for data extraction, transformation, and loading processing, using Python libraries like Pandas and NumPy.
- Developed an interactive dashboard using JavaScript libraries like geo mapping Leaflet.js, Plotly.js, APEXCHARTS.js, and DataTables.js, along with HTML(Bootstraps) and CSS.
- Performed data manipulation and cleaning using Python libraries, Pandas and NumPy.
- Generated visual reports with bars, lines, pies, scatter plots, heat maps, and bubbles plots using Python libraries like Matplotlib, Seaborn, Plotly, ggplot.
- Conducted a descriptive analysis that summarized the relationship between different variables and parameters using Python libraries like Matplotlib, Seaborn, and Tableau.

- Used SQL Queries to extract data from data tables, creating Tables, sub-queries, Joins, Views, Indexes, SQL Functions, Set Operators, and Functionalities.

Amazon Prime Now   **April 2017 – October 2018**
Prime now Associate
- Took ownership of and resolving challenging customer issues related to shipping and delivery.
- Escalated problems or discrepancies in information to relevant teams and following up on resolutions to ensure prompt delivery.
- Communicated in real-time with customers, drivers, customer service associates, delivery station managers, and delivery associates to solve problems and provide excellent customer service.

SONATRACH, The Algerian Oil and Gas National Company
Data Analyst   **September 2011 – January 2014**

- Extracted, Cleansed and Transformed large amounts of Oil & Gas production data
- Loaded Data from different sources into Excel, SQL database and creating datasets for production reporting
- Carried out exploratory data analysis and recognizing the anomalies in oil and gas Production data and correct them using VBA scripting
- Built statistical descriptive charts and dashboards.
- Analyzed and visualized Oil and Gas producing wells data.

ENGIE Former GDF Suez
Data Analyst Intern   **March 2011- August 2011**

- Collected, manipulated, analyzed and Visualized TOUAT Gas E&P Data to have more insights about filed.
- Identified and quantified uncertainties related to E&P Project to help making the ideal investment decisions
- Generated the results using statistical methods: Deterministic and Probabilistic Economic NPV Model by using Monte Carlo Simulation, Sensitivity Analysis and Decision Tree Analyses.
- Utilized SPSS and @Risk Add-in Excel to support the application of these methods.