

RACHA A. SAAD

DATA SCIENTISTT | BUSINESS ANALYST | PETROLEUM ENGINEER

Lebanon Beirut | +961 70 681 249 | racha.saad1@net.usj.edu.lb

PROFESSIONAL EXPERIENCE

Self Employed

Lebanon

Private Tutor and Machine Learning Enthusiast

2016-Present

Provide private tutoring services in Mathematics, Physics, and Sciences, adapting methods to individual student needs, and communicating progress assessments.

Undertake freelance machine learning projects, developing customized solutions based on client requests, and delivering comprehensive project reports with insights and recommendations.

MAALOUMATIHA

Dubai, UAE (Remote)

Data Scientist Internship-Remote

Feb 2024 – Jul 2024

Actively learning and utilizing Dataiku, a collaborative data science platform. Our focus involves working on projects for diverse clients, providing valuable hands-on experience in applying data science techniques and methodologies within a real-world context.

Additionally, I have gained hands-on experience in a business analytics (BA) use cases. I have met with clients for requirement gathering and collaborated closely with both business and technical teams to ensure successful project outcomes.

Hospital Administration, Hiram Hospital

Lebanon

Financial Data Analyst

May 2022- Aug 2022

Enhanced financial decision-making through insightful data analysis, implemented cost-saving measures, and ensured compliance with regulatory requirements by thoroughly reviewing, editing, and verifying data for quality and accuracy.

ZAHRANI OIL INSTALLATION (ZOIL) ZAHRANI

Lebanon

Product Quality Engineer

Jul 2021- Apr 2022

Conducted quality testing of petroleum-based products imported to Lebanon.

Ensured all petroleum testing adhered to ASTM, ISO, IP, and other recognized test methods and protocols.

Utilized the latest equipment in the petroleum testing industry for accurate and reliable results.

Leveraged specialized software to analyze testing data and improve quality assurance processes.

Lebanese Petroleum Administration (LPA)

Lebanon

Data Analyst Internship

Aug 2020-Oct 2020

Gathered and organized data related to drilling operations, emphasizing Well 16/1 offshore.

Conducted research on gas sector development, supply and demand modeling, and collaborated on assessing the potential volume of hydrocarbons within identified prospects, particularly in partnership with the Consortium led by Total Energies.

ZAHRANI OIL INSTALLATION (ZOIL) ZAHRANI

Lebanon

Petroleum Data Analyst

Aug 2019- Oct 2019

Analyzed the laboratory tests' results to decide whether the petroleum products are allowed to enter the Lebanese Market or not. Documented test outcomes and entered the analysis data for petroleum samples into an Excel file

EDUCATION

University of Saint Joseph-USJ

Lebanon

Master: M.Sc. in Data Science

Aug 2022 – July 2024

▪Advanced coursework in machine learning, data analysis, big data and statistical modelling.

▪Gained hands-on experience in various data science and AI use cases, including:

- Statistical Data Analysis, Microsoft Power BI, SQL, Data Visualization, Natural Language Processing (NLP), Convolutional Neural Networks (CNN), Python (Programming Language), R (Programming Language), Neo4j, Time Series Analysis

Phoenicia UNIVERSITY-PU

Lebanon

BE: Petroleum Engineering

Oct 2016 – Jun 2021

- Dean's Honour List

CERTIFICATES

Core Designer, Advanced Core Designer, ML Practitioner, Developer – Dataiku (2024).

ACADEMIC PROJECTS

Leveraging AI for Detection of Water Floods in Lebanon (Distinction)

- Presented to the 8’t International Conference on Green Urbanism (GU) By integrating data-driven approaches.
- Working on a thesis project focused on leveraging AI for the detection of water floods in Lebanon.
- Researching and implementing AI algorithms to enhance detection and prediction of water floods in the region.
- Combining SAR technology with machine learning and deep learning approaches to improve flood detection accuracy and prediction.
- Utilizing deep learning techniques, specifically U-Net for image segmentation, to analyze Sentinel-1 SAR images.
- Aiming to contribute to solutions for this critical environmental challenge.

Facial Expression Recognition with Machine Learning (A grade) -

Explored cutting-edge techniques in facial emotion recognition.

- Implemented facial expression detection through pixel data analysis, and demonstrated proficiency in advanced AI concepts and methodologies

Web Scraping and NLP Analysis on Facebook Marketplace for Cars (A- grade)

- Applied Natural Language Processing (NLP) techniques to extract insights and sentiments from text data, and created informative visualizations using Tableau

Diverse Projects Covering Hadoop, Python, R, SQL, Regression, Time Series, etc.

Lebanese Export Gas Pipeline Design (A- grade)

Designing a robust and efficient gas pipeline system and addressing challenges in route optimization, pipeline modelling using methodologies like the Weymouth Panhandle-A models, and ensuring integration of advanced technologies for reliable and sustainable natural gas transportation.

SKILLS & COMPETENCIES

Technical Skills:

- **Big Data:** Data Mining, Data Analysis, Data Visualization, Data Transformation, Data Warehousing
- **DevOps:** CI/CD Pipelines, Automated Testing, Configuration Management
- **MLOps:** MLflow, Model Deployment, Model Monitoring
- **Cloud Computing** - **Web Scraping**

SOFTWARE: MS Office, Python, VS Code, Hadoop, SQL, Tableau, Power-BI, Dataiku, Docker, Apache Spark, Petrel, Google Cloud (Azure), GitHub, CMG, Schlumberger Software Suite. **LANGUAGE:** English (Fluent) – French (Basic) – Arabic (Fluent)