MOHAMED CHNAFY

Data Scientist

LinkedIn
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Online Portfolio

Data Scientist with 3 years of experience, currently pursuing a Specialized Master's in Geo Data Management for Energy Mix at IFP School (French Institute of Petroleum). Specialized in predictive modeling and geostatistics applied to the oil and energy sectors. Strong experience in complex data analysis and AI solution development for industrial applications. Proficient in cloud and big data technologies for oil data processing. Seeking an internship starting April 2025.

SKILLS

Tools & Technologies

Machine Learning & Deep Learning: Scikit-learn, TensorFlow, PyTorch, Keras, FastAI

Data Visualization: Matplotlib, Seaborn, ggplot2, Tableau, Power BI, Streamlit, DASH, Rshiny

Big Data: Apache Spark, Hadoop, Hive, Kafka

Cloud Computing: AWS, Google Cloud Platform

Databases: PostgreSQL, Oracle, IBM Db2, PostGIS

Version Control: Git

Containerization: Docker

E&P Software & Formats:

Petrel, EarthQuick, LAS, DLIS, SEG-Y, WITSML

Analytics

Soil parameter prediction
Real-time monitoring systems
Well logging and seismic data analysis
Reservoir characterization
Real-time sensor data processing
Anomaly detection and time series
Advanced statistics and geostatistics
Signal processing
Performance monitoring
Data management

Programming Languages

Python | R | SQL

C++ | Java | Julia | Scala | Matlab

LANGUAGES

French - Native
English - C1 Level

INTERESTS

Basketball
Hiking

EDUCATION

Specialized Master's Degree, Geo Data Management for Energy Mix, IFP School (French Institute of Petroleum), Paris, France, 2024 - 2025

Georesources (E&P workflow, wireline logging, well testing, RPE tools, Reservoir data), Data Management (Data governance, Actors & companies in DAMA, Data life cycle & data quality, Data model & reference data), Project Management (Certificate Associate in Project Management (CAPM)), Geomatics/GIS (Geodesy, Reference system, Photogrammetry, Topography, GIS/SQL, Spatial calculations)

Master's Degree in Applied Mathematics, Data Science, 2019 - 2020

Claude Bernard University Lyon 1

Machine Learning, Deep Learning, Cloud, Big Data Analytics, Data Mining, Visualization

Master's Degree in Applied Mathematics and Statistics, 2018 - 2019

Claude Bernard University Lyon 1

Probability, Statistics, Time Series, Numerical Analysis, Optimization, Signal Processing
Project: Image denoising using Gaussian mixture models and classification algorithms

Bachelor's Degree in General Mathematics, 2016 - 2018

University of Avignon

Strong foundation in mathematics, probability, and statistics

PROFESSIONAL EXPERIENCE

Data Scientist - Fondasol, Avignon, France, 12/2020 - 12/2023

- Design and deployment of machine learning and geostatistical models for geotechnical characterization: 30% improvement in predictive accuracy of soil mechanical properties and implementation of an anomaly detection system for risk zone identification.
- Application of optimization and deep learning algorithms for geotechnical survey planning: 20% reduction in investigation costs and 40% acceleration in soil reconnaissance data processing.
- Development of a PostgreSQL-based big data architecture and creation of geospatial dashboards (R Shiny, Dash, Streamlit) for real-time soil reconnaissance data monitoring.
- Led technological intelligence efforts, integrating 3 new techniques combining geostatistics and machine learning to enhance soil parameter prediction, increasing model accuracy by 20%.

NLP Research Intern - LIRIS, Lyon, France, 03/2020 - 09/2020

- Development of a student assistance chatbot for LIRIS laboratory, providing information about academic programs, curricula, and university operations.
- Significant reduction in student query response time and improved accessibility to administrative information.
- Python implementation using PyTorch and TensorFlow.
- Scientific literature review for state-of-the-art NLP research.