MOHAMED ELBIRER

SUMMARY

Data scientist and cloud engineer with an electrical engineering background who focuses on data analytics, machine learning, and AI-driven solutions. Adept at creating data visualization, predictive modeling, and AI tools to support strategic decision-making. Knowledgeable about utilizing state-of-the-art analytics and cloud infrastructure through collaboration with a variety of technology suppliers.

EXPERIENCE

IT Consultant

FaceOne Engineering Consultants // Abu Dhabi, UAE // Jan 2024 – Present

- Built and optimized data pipelines using Python and SQL to support AI-driven decision-making.
- Managed Azure-based cloud infrastructure for data storage, processing, and AI model deployment.
- Utilized OCR (Tesseract) to extract insights from scanned documents, enhancing data completeness.
- Developed machine learning models for housing demand analysis, leading to data-driven recommendations.
- Designed interactive dashboards using PowerBI, Matplotlib, and Seaborn for real-time insights.
- Collaborated with stakeholders to align AI solutions with business needs, ensuring ethical AI implementation.

E-Learning Consultant

<u>UNICEF</u> // Khartoum, Sudan // Aug 2022 – Apr 2023

- Collaborated with software development teams to test and debug educational software, ensuring cross-platform functionality.
- Led the implementation of e-learning systems in 9 states in the Sudan along with a team of 6 interns, engaging with state ministries, community representatives and launching learning centers.
- Integrated EMIS frameworks to streamline data collection, analysis, and reporting for educational institutions, enhancing data-driven decision-making at the state level.
- Designed and delivered technical capacity-building workshops for Ministry of Education personnel, enabling independent management of e-learning platforms.
- Managed configuring educational tablets, including data integration and solar-powered solutions tailored to community needs.

- Conducted impact assessments and data-driven evaluations for e-learning centers, refining strategies to improve student engagement and operational scalability.
- Supervised community mobilization efforts, facilitating registrations and stakeholder engagement, with detailed reporting on challenges and outcomes.

E-Learning Intern

UNICEF // Khartoum, Sudan // Jun 2021 – Dec 2021

- Contributed to the development of Sudan's first Digital E-Learning Platform, creating over 1,000 interactive learning games aligned with national curricula.
- Analyzed platform usage and engagement data, providing actionable insights for design enhancements and content prioritization.
- Collaborated with Microsoft engineers to optimize platform performance, including conducting A/B testing for interface design improvements.
- Presented statistical insights to telecommunications partners, successfully securing funding and technical support for platform expansion.

EDUCATION

Bachelor of Electrical & Electronic Engineering *University of Khartoum* // Sudan // Aug 2022

Licenses & certifications

<u>Certified AWS Solutions Architect</u> (2024) - Expertise in cloud infrastructure design and optimization

IBM Data Science (2024) - Hands-on experience in Python, SQL, machine learning, and data visualization with real-world projects.

UoM Politics and Ethics of Data Analytics

(2024) - Understanding of data governance, ethical AI, and responsible data-driven decision-making.

PROJECTS

Analyze Brand Activity

- Developed a comprehensive analysis of brand performance and consumer engagement using advanced analytics and visualization tools.
- Leveraged Python, machine learning models, and interactive dashboards to extract actionable insights and track market trends.
- For more details, see the project on LinkedIn: Analyze Brand Activity

TECHNICAL SKILLS

Programming Languages: Python, SQL, JavaScript, C++, HTML, CSS

Data Analysis Tools: R, Scikit-Learn, Matplotlib, Seaborn, TensorFlow, PyTorch, PowerBI

Cloud Technologies: Amazon Web Services, Microsoft Azure, Google Cloud platform

Version Control: Git

Web Development: Full Stack Development, JavaScript Frameworks (React, Angular), NodeJS, Flask, Django

Data Management: Data Pipeline Development, ETL Processes, Data Integration, Data Pipeline Management

Data ETL tools: Apache Airflow, Apache Spark, Amazon Glue

Web scrapping & Data collection: BeautifulSoup, Scrapy

Project Management: Stakeholder Communication, Goal-Setting, Milestone Management

Problem-Solving: Analytical Approach, Structured Issue Resolution

Communication: Strong Written and Verbal Skills, Cross-Functional Team Collaboration

OCR: Tesseract, Amazon Textract

LANGUAGES

• English: Professional Proficiency

Arabic: Native Speaker

REFERENCES

Rasha Obaid - Education Specialist UNICEF Sudan robaid@unicef.org

Osman Elkheir - Chairman Faceone Group UAE osmanelkheir@gmail.com