

ESLAM HUSSIEN ABUELLA

Data Scientist | GIS Analytics Technologist | Azure Certified Professional

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SUMMARY

Data Scientist and Geospatial Technologist with a strong foundation in data science, data analytics, machine learning, and cloud-based solutions, looking for data science/analysis opportunities. Currently pursuing an MSc in Data Science at Coventry University, combining deep experience in Python, SQL, R, and Azure with advanced spatial data processing. Former Enterprise GIS Manager at Alcis Geo, with proven success in automating geospatial workflows, developing data-driven insights, and implementing scalable data systems. Skilled in end-to-end data engineering workflows, statistical modelling, and visualisation to support evidence-based decision-making.

EDUCATION

MSc Data Science | Coventry University | United Kingdom | Expected May 2026 | (predicted 80%)

MSc Geology | Cairo University | Egypt | Jan 2022 | Thesis: Geological Mapping Using Geophysical & Remote Sensing Techniques | 83%

BSc Geoscience | Cairo University | Egypt | Jun 2014 | Graduation Project: Reservoir Static Model | 70%

PROFESSIONAL EXPERIENCE

- **Enterprise GIS Manager | Alcis Geo | Guildford, United Kingdom | Jul 2023 - Apr 2025**
 - Led automation of geospatial data processing and analysis using Python and SQL, reducing manual effort by 40%
 - Designed and maintained scalable ArcGIS Enterprise & Azure-based solutions with optimised data models, decreasing the data storage redundancy by 50%
 - Developed advanced spatial analytics strategies using FME, custom ETL, ArcGIS, and Python notebooks to uncover 6 actionable insights and 3 new business opportunities
 - Mentored a team of 5 GIS analysts in data science & AI approaches, visualisation, and reproducible advanced analytics workflows
- **Senior GIS Solutions Engineer | Quality Standard Information Technology (formerly Esri Northeast Africa) | Cairo, Egypt | Jan 2020 - Jun 2023**
 - Delivered enterprise GIS solutions integrating ArcGIS, relational databases (RDBMS), and hybrid on-premise and cloud infrastructure for over 27 sites across Egypt and the Middle East
 - Customised GIS and data workflows using Python and APIs to support automated data integration across Esri COTS, custom solutions, and third-party systems (e.g., SAP), increasing efficiency by 60%
 - Processed and analysed satellite imagery and geospatial datasets using advanced remote sensing techniques to extract land-use, environmental change detection, crop classification, and topographic insights across 4 contrasting locations in Egypt
 - Conducted over 16 training programmes and provided daily on-site technical support to clients across various sectors, including Security, Government, Oil & Gas, Natural Resources, Utilities, NGOs

- **GIS Technical Support | Penta-b | Cairo, Egypt | Jan 2018 - Dec 2019**
 - Delivered over 10 GIS and mapping projects across Utility, Land management, Property protection, Agriculture, and NGOs sectors
 - Implemented more than 10 GIS solutions via open-source platforms (QGIS, GeoServer, PostGIS) to enhance spatial data management
 - Ensured accuracy, completeness, and quality assurance for field-collected datasets that supported 6 deep learning and geospatial projects, improving model reliability
- **Calibration Engineer | OMEGA Calibration Services | Cairo, Egypt | Oct 2016 - Dec 2017**
 - Performed calibration and statistical uncertainty analysis under ISO/IEC 17025 standards for the three laboratory disciplines: dimensions, pressure, and torque
- **Geologist - Mud Logger | Petroservices GmbH | Cairo, Egypt | Oct 2014 - Sep 2016**
 - Managed real-time drilling data collection, analysis, and geological interpretation for 24 onshore and offshore drilling sites across Egypt, ensuring accurate borehole evaluation and operational efficiency
 - Prepared over 100 operational and geological daily reports for onshore and offshore boreholes, providing accurate documentation and timely data delivery to drilling teams

CORE SKILLS

- **Programming & Analytics:** Python, R, SQL, Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, PyTorch, Keras, TensorFlow, PySpark
- **Machine Learning:** Regression, Classification, Clustering, Predictive Modelling, Model Evaluation
- **Data Engineering:** FME Workbench, Data Wrangling, Feature Engineering, PCA, EDA, Data Cleaning
- **Visualisation:** Tableau, ArcGIS Dashboards, ArcGIS Online, Folium
- **Cloud:** Microsoft Azure (Administrator Certified)
- **Database:** SQL Server, PostgreSQL/PostGIS, MongoDB
- **Geospatial Intelligence:** ArcGIS Pro, ArcGIS Enterprise, QGIS, Remote Sensing, Spatial Analysis
- **Tools:** Jupyter, RStudio, GitHub, VS Code, Spyder, Mathematical & Statistical Analysis, Hadoop, Spark

CERTIFICATIONS

NoSQL, Big Data, and Spark Foundations Specialization | IBM | COURSERA | 2026 (In progress)

Machine Learning Professional Certificate | IBM | COURSERA | 2026 (In progress)

Data Science Professional Certificate | IBM | COURSERA | 2025

Data Analyst Professional Certificate | IBM | COURSERA | 2025

Microsoft Azure Administrator Associate | Microsoft | 2025

Microsoft Azure Fundamentals | Microsoft | 2024

GIS Specialization | UC Davis, California | COURSERA

PUBLICATIONS

- Implementation of Spaceborne optical data and field investigation for geo-structural mapping of an interior rift basin: A case study from Kharit area, Southeastern Desert, Egypt

LANGUAGES

Arabic: Native | English: Proficient