

Mohamed Atwan

DATA SCIENTIST

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- **Kaggle** : kaggle.com/mo7amed3twan
- **LinkedIn** : linkedin.com/in/mo7amed3twan
- **GITHUP** : github.com/MO7AMED3TWAN

About Me “We Can Change the World Through the Data”

Results-driven Data Scientist with 2 years of experience in **Machine Learning, Deep Learning, Natural Language Processing, and Data Science**, skilled in **extracting insights** and **building data-driven solutions**.
Proven track record of leading a team to a **top 5** finish in the **MTC-AIC2 AI competition** by leveraging **Deep Learning** and **advanced modeling techniques**.
Actively engaged in **community knowledge-sharing** as an **Alpha Microsoft Ambassador**, with a focus on fostering **collaboration** and **innovation** in **data science**.

Education

Bachelor’s Degree of Science in Artificial Intelligence, **Kafr Elsheikh University** 2021 - 2025

Specialized coursework in Machine Learning, Deep Learning, Data Science, and Data Engineering

GPA: 3.3 “Very Good”

Experience

Information Technology Institute (ITI)

Business Intelligence Development Trainee

July 2024 – September 2024

- Gained experience in data warehousing, advanced SQL, Power BI, and Tableau.
- Designed and optimized data warehouses for efficient management.
- Created interactive dashboards to provide actionable insights.
- Applied business intelligence tools to solve business challenges.

Digital Egypt Pioneers Initiative (DEPI)

Trainee Data Engineer

July 2024 – October 2024

- Mastered SQL for data management and optimization.
- Designed scalable data warehouses for efficient storage and retrieval.
- Gained hands-on experience in Python for data processing and automation.
- Applied machine learning concepts and MLOps tools like MLflow and Hugging Face.
- Developed skills in Azure cloud services and platform integration.

Volunteering

Microsoft Learn Student Ambassadors, KFS Branch

Database Administrator

April 2023 - September 2024

- Managed the club’s database infrastructure, ensuring optimal performance and data integrity.
- Designed and optimized schemas for scalability and efficiency.
- Implemented monitoring solutions to ensure continuous system availability.
- Collaborated with stakeholders to deliver tailored database solutions and troubleshooting support.
- Shared best practices with the community to foster learning and development.

Microsoft Learn Student Ambassadors, KFS Branch

Head of Data Engineering

September 2024 - Present

- Developed and executed the strategic roadmap for the Data Engineering track.
- Led and mentored a team of student mentors, ensuring effective execution of learning objectives.
- Fostered a collaborative, educational environment and provided ongoing guidance and support.

- Led the design and development of advanced NLP systems focused on Arabic ASR, language models, and diarization.
- Defined project roadmaps, ensuring team expertise in RNNs, LSTMs, GRUs, Transformers, and LLMs.
- Integrated state-of-the-art NLP models (e.g., BERT, AraBERT, DeepSpeech) into real-world applications.
- Fine-tuned pre-trained models for speech recognition, text correction, and diacritization tasks.
- Mentored team members, designed training materials, and assessed skills in NLP and machine learning.
- Collaborated with engineers and data scientists to build scalable pipelines for large-scale text and audio processing.
- Optimized models for accuracy, efficiency, and scalability, applying noise reduction and voice diarization techniques.

Projects

Diabetes Prediction and Management System

October - 2024

Team Leader That Developed an AI-powered solution to improve diabetes diagnosis and management

- Computer Vision for Early Detection: Applied a transformer-based model to analyze retinal images and detect early signs of diabetic retinopathy.
- Risk Stratification Model: Implemented a machine learning model to assess diabetes risk based on health metrics, offering personalized recommendations.
- NLP-Based Medical Chatbot: Designed an AI-driven chatbot to provide patients with timely health information, answer questions, and offer support.

Additionally, there is more work available on my GitHub, where I have shared several projects related to:
Data Science | Machine Learning & Deep Learning | Natural Language Processing (NLP)

Courses

Database Fundamentals – ITI Mahara Tech	September - 2021
Python Programming Basics – ITI Mahara Tech	October - 2021
Assessment for Data Analysis and Visualization Foundations – IBM	October - 2023
Introduction to Data Analytics – IBM	October - 2023
Excel Basics for Data Analysis – IBM	October - 2023
Data Visualization and Dashboards with Excel and Cognos – IBM	October - 2023
Python for Data Science, AI & Development – IBM	December - 2023
Machine Learning Specialization – Stanford University & DeepLearning.AI	April 2024

Skills & abilities

Version Control & Deployment

- Proficient in Git, GitHub, and Docker for version control, code management, and containerization, ensuring seamless deployment and collaboration.

Data Management & Programming

- Databases: Skilled in SQL Server, PostgreSQL, and MySQL for efficient data management and retrieval.
- SQL: Advanced proficiency in T-SQL, DQL, DDL, and DML for complex querying and database manipulation.
- Python: Expertise in Exploratory Data Analysis (EDA), NLTK, Spacy, PyTorch, TensorFlow, and Transformers for data analysis, manipulation, machine learning, and deep learning tasks.

Data Pipeline Development

- Skilled in ETL and ELT processes to efficiently extract, transform, and load data for analysis and reporting.

Data Analysis & Visualization

- Proficient in Power BI, Tableau, and Excel to create clear, impactful visualizations that drive data-driven decision-making.

Machine Learning & Statistical Modeling

- Experienced in supervised and unsupervised learning techniques for predictive modeling.
- Knowledgeable in Deep Learning models, including CNN, RNN, and Transformer architectures for complex data modeling.

Natural Language Processing (NLP)

- Skilled in fine-tuning NLP models for LLMs like BERT, GPT-2, and T5 to solve language-based tasks.

Big Data & Distributed Computing

- Expertise in Hadoop and Apache Spark for large-scale data processing and distributed computing.

Cloud Analytics

- Proficient in Azure Data Factory, Azure Synapse Analytics, and Azure ML for orchestrating large datasets, transforming data, and deploying machine learning models.
- Experienced in leveraging cloud-based solutions to automate workflows and enable scalable, efficient analytics and machine learning processes.

Soft Skills

Leadership | Emotional Intelligence | Communication | Team Working | Problem Solving

Languages

Arabic: Native/Fluent | English: B1 (Intermediate) | German: A1 (Beginner)