

# YOUSEF MAHMOUD

## Data Engineer

📍 Cairo, Egypt

📞 +20 100 438 9030

✉️ Yousef.soliman.de@gmail.com

👤 Exempted

LinkedIn: [linkedin.com/in/y0usefma7m0ud](https://linkedin.com/in/y0usefma7m0ud)

Github: [github.com/Y0U5F](https://github.com/Y0U5F)

Website: [y0u5f.github.io](https://y0u5f.github.io)

### Professional Summary

Result-oriented Data Engineer with a strong background in Computer Science and Data Architecture. Proven experience in designing scalable ETL pipelines, data warehousing solutions, and automating complex data workflows. Adept at transforming raw data into actionable insights through rigorous data processing and optimization. Eager to leverage technical expertise in a challenging Data Engineering role.

### Internships

#### Information Technology Institute (ITI)

Minya, Egypt

June 2025 – Nov 2025

Data Engineering Intern

Project: Hollywood in the Cloud | AWS (*Lambda, Glue, Athena, S3, Power BI*) [GitHub]

- Built a Serverless Data Pipeline to ingest 100+ years of movie data from TMDB API using AWS Lambda.
- Automated ETL processes with AWS Glue and enabled SQL-based analysis on S3 data via Amazon Athena.
- Visualized insights identifying Q4 as the peak release window using Power BI.

Project: Olist E-commerce ELT Pipeline | Snowflake, Airflow, dbt, Docker [GitHub]

- Architected a scalable ELT pipeline processing 100K+ records using Medallion Architecture (Bronze, Silver, Gold).
- Orchestrated daily workflows using Apache Airflow and implemented dbt with 26+ automated tests.

Project: ITI Examination System | SQL Server, T-SQL, SSMS, Docker [GitHub]

- Engineered a normalized relational database with complex Stored Procedures for automated exam generation.
- Established a secure RBAC system and created Audit Triggers for data integrity.

#### Instant Software Solutions

Hybrid

AI Engineer Intern

May 2025

- Developed 6 AI/ML projects including recommendation systems, sentiment analysis, chatbots, and emotion recognition using NLP, Computer Vision, and optimization algorithms (ALS, SVD).

### Technical Skills

Programming Languages: Python (Advanced), SQL, Bash Scripting, Java, C++

Data Engineering: Apache Airflow, Apache Spark, Hadoop, Kafka, dbt, Snowflake, MongoDB

Cloud & DevOps: AWS (Lambda, Glue, Athena, S3, EMR, Redshift, EC2), Docker, Linux, Git/GitHub, Jenkins

Databases: SQL Server, PostgreSQL, MongoDB, Snowflake

Visualization & Analytics: Power BI, Matplotlib

Machine Learning: NLP, Computer Vision, Scikit-learn, CNNs

Soft Skills: Problem Solving, Agile Project Management, Team Leadership, Critical Thinking

### Education

#### Beni-Suef University

Beni-Suef, Egypt

2020 – 2024

Bachelor of Computer Science, IT Dept.

- Graduation Project: Skin Cancer Detection – Grade: A+

- Spearheaded an AI healthcare platform for skin cancer detection using CNNs, achieving 96% classification accuracy. Built a patient ecosystem with drug reminders and chat modules.

### Certifications & Training

AWS Academy Graduate - Data Engineering & Cloud Foundations

2025

Artificial Intelligence Diploma (170 Hours)

2024

Fundamentals of Agile Project Management

2022

Technical Courses: Apache Spark (Frank Kane), Docker for DevOps (Mumshad Mannambeth), MongoDB (Maximilian), Modern Data Warehouse (Baraa Salkini)

### Languages

Arabic: Native

English: Advanced