# **Mahmoud Elmasry**

# AI Engineer

in Mahmoud Elmasry ( M-Masry4122 Egyptian

#### **Profile**

AI Engineer and Machine Learning Specialist with a strong background in machine learning, deep learning, computer vision, and natural language processing (NLP), experienced in designing and deploying AI solutions for real-world applications, using **Python**, **TensorFlow**, **PyTorch**, and **OpenCV**. Proficient in data manipulation, data visualization, and cloud-based data engineering.

#### **Education**

# 9-Month Professional Diploma in AI and ML

Information Technology Institute (ITI), MCIT

2023/10 – 2024/07 Alexandria, Egypt

# BCS. in Computers and Artificial Intelligence

Cairo University

2018 – 2022 Cairo, Egypt

# **Projects**

### Arabic Dialect Classification (ITI)

- Developed an end-to-end machine learning solution for Arabic Dialect Classification using Python and NLP techniques to analyze Twitter data, enhancing text-based AI capabilities for language processing.
- Deployed the model using Flask.

#### CineMate Movie Recommender System (ITI)

- Developed a recommendation system for the MovieLens dataset, containing User-Based Recommendations using **Deep Factorization Machine** & **Neural Collaborative Filtering**.
- Developed another Item-Based Recommendation system using Cosine Similarity.
- Deployed the model using Dash.

# Fly Eye Image Caption Generator (ITI)

• Created a model that generates descriptive captions for images using Advanced deep learning techniques (DenseNet201, LSTM, and Residual Blocks) using TensorFlow.

# RASA Framework AI-driven Academic Assistant (Graduation Project)

Cairo University

• Utilized **RASA Framework** to create an AI-driven Chatbot to help academic students Efficiently & Effectively finish their courses as fast as possible.

# Head Pose Detection (ITI)

• Head Pose Estimation utilizing Machine learning to detect facial landmarks and predict Roll, Pitch, and Yaw from images and videos using **Mediapipe**, **XGBoost**, **OpenCV**, and **Scikit-learn**.

#### IMDB Analysis (ITI)

- End-to-end IMDb analysis pipeline, including Web Scraping, Data Exploration & Analysis, and creating a Dashboard & Recommendation System Using **Plotly Dash**, **Pandas**, and **Scikit-learn**.
- Published Dashboard on the official **Plotly** 🗷 website.

# **Professional Experience**

**Data Engineer** 2023 – 2024

Abdulmalek Al Esmail Investment Group - AEIG

Riyadh,

• Implemented a Data Pipeline & ETL to develop a cloud-based data warehouse Saudi Arabia (Remote) for real-time analytics.

• Brands: Caneles, Chezzz, Tebsi, Bugshan

Oracle Developer 2022 – 2023

Egyptian Naval Forces - Troop Command

Alexandria, Egypt

- Developed and Maintained Oracle 6i Forms & Reports using SQL & PL/SQL.
- Managing and Backing up Servers and Databases.

# Billing & Payments Representative.

2022 - 2022

Vodafone UK (VOIS)

London,

• Analyze billing data to identify trends and potential issues.

England (Remote)

- Investigate and resolve complex billing issues and escalations.
- Coordinate with other departments to address and resolve customer concerns.

#### **Technical Skills**

#### Machine Learning & Artificial Intelligence

Tensorflow, Pytorch, OpenCV, Scikit-learn, Pandas, Numpy.

# Robotic Process Automation (RPA)

UiPath, Microsoft Power Automate.

# **Programming Languages**

Python (Primary), C++, C, Java

#### **Big Data**

Hadoop, Spark & Pyspark, Hive, Kafka.

#### Other

Generative AI, Transformers, LLMS, GANS, Data Engineering, DS & Algorithms, OOP, Google Cloud, AWS, Agile, Git & GitHub, Linux, Web Scrapping, Agile.

#### **Deep Learning**

NLP & Computer Vision, Spacy, Surprise.

# **Database Management**

ETL, SQL, PL/SQL NoSQL, Data Pipelines, Cloud Computing.

#### **Data Visualization**

Matplotlib, Seaborn, Power BI, Plotly, Dash.

#### **Recommender Systems**

#### Courses

Python 🗹

HackerRank

Pandas 🗆

Kaggle

#### AWS Cloud Foundations [2]

**AWS Academy** 

Red Hat System Admin 🛮

Information Institute: Mahara Tech

# Data Science & Analytics 🗷

**IBM** 

## Database Fundamentals 🛮

Information Institute: Mahara Tech

#### Data Cleaning [2]

Kaggle

#### Data Visualization

Kaggle

## Generative AI

Information Institute: Mahara Tech