Mohamed Omar

✉ moobnomar@gmail.com 📞 +20 102 859 9184 📍 Cairo, Egypt ⚭ Exempt

in https://www.linkedin.com/in/moomarr/

Education

MSc in Machine learning and data science, *School of computing, Queen's university*
01/2022 – 05/2023
Kingston, Canada

BSc in Computer science,
Faculty of information technology, Misr university for science and technology
09/2017 – 07/2021
6th of October city, Egypt

Professional Experience

Teaching & Research Assistant,
Faculty of information technology, Misr university for science and technology
10/2022 – present
6th of October city, Egypt

- Teaching Assistant in the Artificial Intelligence Department for the following courses: Introduction to Artificial Intelligence, Machine Learning, Natural Language Processing, Data Science, Data Analysis, and AI Applications
- Research Assistant:
  - Supervising the graduation projects of students from all departments and scientific research as well.
  - Analysis of the college's data.
  - Help and guidance for graduate students.

AI and data science trainee, *DEBI*
11/2021 – 11/2022
Cairo, Egypt

- I studied extensively in machine learning engineering, data mining, and data science and worked on many beneficial projects.
- Attended training courses and got hands-on experience in processes, techniques, and industry.

Certificates

- HCIA AI -Huawei, 2021.
- Introduction to Data Science in Python - Datacamp
- HCIA Cloud computing, Huawei, 2022.
- Supervised Learning with scikit-learn - Datacamp
- Completion of "seeds for the future 2022" Huawei program.
- Introduction to SQL Server- Datacamp

Projects

Network complain prediction, *MSc thesis*
The main idea of this is to create an automated ML system that helps telecom companies anticipate customer satisfaction based on key performance indicators and reduces pressure on customer service.
The main stages of the project are:
- Using Power BI, useful insights are shown to analyze the data
- Using Matplotlib, Ploty, and missingno to visualize the data using python
- Using Pandas to prepare and preprocess the data
- Using Scikit-Learn to build ML-supervised learning algorithms

Hear Me Out, *BSc graduation project*
The main idea of this project is to translate sign language into text. so, normal people can understand it, using Flutter technology and deep learning, we have created a chat app, many users can access the app and connect with special people who can speak with their sign language in front of the camera which translate their signs to text so people can understand them easily
- Fully integrated assistive application to help deaf and dumb people make their lives easier.

- Transformed TF model into TensorFlow light to boost the processing speed
- Tech Stack: Deep Learning, TensorFlow, Flutter, Firebase

Covid19 recovery detection
If someone has some symptoms, the model will predict the outcome (death or recovery). Logistic Regression, KNN, Decision Tree, SVM, and Naive Bayes models.

Hospital patients' length of stay prediction
Based on the data set available from the US Department of Health, artificial intelligence models and machine learning are used to predict the extent of a patient's stay in the hospital using linear regression and other algorithms.

Wish.com product rating prediction
Data science life cycle for tuning | Inspect and clean data | Try different ML models | Some feature engineering | Scikit-Learn| Pandas

Fake Reddit posts prediction
Different text preprocessing techniques | Tunable pipeline including the vectorizer | character\word-level vectorizer. | XGBoost| stemming | tf-idf

Speed Dating Match Prediction
Grid, Random and Bayesian search | Different preprocessing approaches using Data pipeline | cross-validation

Hotel management system
The hotel database management system has been designed to simplify office tasks at the front desk, improve management functions, and enhance customer experience and guest bookings. A hotel can improve efficiency with the software and effectively manage operations such as check-in, check-out, and booking confirmation.
Tech Stack: ERD|SQL

Skills

Programming languages
Python | C++ | Java (basics)| SQL

Data Science Skills
Data Cleaning|Data Analysis|Data Visualization

CS Concepts
Problem Solving|Data Structures| Algorithms

Mathematics and statistics
Linear Algebra| Calculus| Probability|Statistics.

Libraries/Frameworks
Pandas| Numpy| Matplotlib| Plotly| Seaborn.

Machine Learning
Scikit-learn| Supervised| Unsupervised|Keras and TensorFlow

Database
SQL

Soft skills
Presenter|Problem solver and creative thinker| Self motivated| Fast learner|Time Management.

Other
Excel| Power BI| Powerpoint|Presentation|Scientific Research

Languages

- Arabic (Native)
- Engilsh