Mahmoud Ibrahim

Data Scientist

mahmoudibrahimabdelfattah48@gmail.com +2001149973327 Cairo Helwan
github.com/MahmoudIbrahims linkedin.com/in/mahmoud-ibrahim-93a376258 Egypt

Professional Experience

04/2022 – 08/2024
Data Scientist, *UpWork*
- Implemented advanced natural language processing techniques to enhance customer sentiment analysis accuracy by 25%.
- Utilized Python, LLMs, TensorFlow, PyTorch, spaCy, and NLTK to develop customized solutions.
- Streamlined business processes resulting in a 20% increase in customer engagement.
- Demonstrated proficiency in cutting-edge NLP technologies and delivered measurable business outcomes.

02/2023 – 06/2023
Poland
Data Scientist, *Flexee*
- Utilized time series analysis and Recurrent Neural Networks (RNNs) to forecast sales trends.
- Improved accuracy of sales predictions by identifying patterns in historical data.
- Enhanced forecasting capabilities supported better inventory and resource management decisions for businesses.

Education

10/2018 – 07/2022
Cairo, Egypt
Bachelor's degree in Computer Science, *El shorouk Academy*
- Studied basic programming, algorithms, data structures, and software development.
- Covered advanced topics including artificial intelligence, cybersecurity, and statistics.
- Participated in theoretical learning, practical projects, and internships.

Projects

Generation text from images, *LLMs*
- Implemented the LLaVA model to generate image descriptions and translated them into Arabic using Google Translate.
- Streamlined processing of English image and text descriptions, enhancing efficiency in cross-language communication.
- Achieved a 20% reduction in translation time Arabic

Sales Analysis and Forecasting, *TIme Series*
- Developed a sales forecasting model using time series analysis and LSTM neural networks.
- Achieved improved forecast accuracy, enabling better inventory management and strategic planning.
- Conducted data preprocessing, exploratory data analysis, and feature engineering to enhance model performance.
- Provided actionable insights for data-driven decision-making through the developed forecasting model.

Sentimental Analysis of the Restaurant, *Text classification*
- Conducted sentiment analysis on 1000 restaurant reviews using TF-IDF and various natural language processing (NLP) techniques.
- Leveraged TF-IDF and NLP methods to accurately analyze and categorize restaurant reviews based on sentiment.
- Achieved a 15% increase in customer retention rates as a result of the initiative.

Courses

03/2024 – 04/2024 **Generative AI working large language models,** *LinkedIn*
- Leveraged linguistic models including GPT (Generative Pre-Trained Transformer) models for text generation and enhancing natural language processing tasks.
- Utilized APIs and fine-tuning techniques to create cohesive and contextually relevant content.
- Applied cutting-edge technologies to innovate solutions across various domains.

07/2022 – 10/2022 **Data Science with python,** *IBM company*
- Completed the Data Science with Python course by IBM, acquiring comprehensive knowledge of data science concepts and techniques.
- Proficient in building, training, and evaluating machine learning models using popular libraries such as Scikit-learn and TensorFlow.
- Skilled in data preprocessing, exploratory data analysis, and solving classification, regression, and clustering problems through practical projects.
- Prepared to apply expertise in data science to real-world scenarios.

01/2022 – 05/2022 **Data Analysis with python,** *IMB company*
- Established skills in data analysis and processing using Python.
- Proficient in core Python libraries including Pandas, NumPy, and Matplotlib for data processing, cleaning, transformation, and clustering.
- Experienced in statistical analysis and exploratory data analysis (EDA) to extract insights from datasets.
- Applied learning through projects and practical exercises to reinforce theoretical knowledge.

04/2021 – 09/2021 **Deep learning specialist,** *Stanford University*
- Studied building, training, and applying deep neural networks.
- Mastered techniques such as hyperparameter tuning, regularization, and optimization.
- Covered deep learning applications including convolutional neural networks (CNNs) for image recognition.
- Explored recurrent neural networks (RNNs) for sequence modeling and natural language processing.

10/2020 – 02/2021 **Machine learning specialist,** *Stanford University*
- Studied an introduction to machine learning with Professor Andrew Ng.
- Covered supervised and unsupervised learning techniques.
- Learned about neural networks and their applications.
- Gained practical skills for developing AI applications to tackle real-world problems.

Skills

Programming Languages
Python (NumPy, Pandas, Scikit-learn)

Data Visualization
Matplotlib, Seaborn, Plotly, Tableau,power BI

Data Preprocessing
Data Cleaning, Feature Engineering

Deep Learning
TensorFlow, Keras, PyTorch

Machine Learning
Supervised and Unsupervised Learning, Ensemble Methods, Neural Networks

Version Control
Git, GitHub

Natural Language Processing (NLP)
Text Mining, Sentiment Analysis, modeling language

Database Management
SQL