

Mohammad Talaat

Data Scientist

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Data Science / ML Engineer at Upwork with experience in developing, testing, and optimizing data-driven solutions. Skilled in applying machine learning techniques and analytical methods to solve complex problems and improve model performance.

Work Experience

Applied Data Science Lab

Dec 2024 - Present

WorldQuant University

- Participating in a series of 8 data science projects, including accessing and cleaning data from various sources (files, SQL/NoSQL databases, APIs), building machine learning models, and preparing training datasets using ETL pipelines.
- Creating visualizations to explain data insights and model predictions to non-technical audiences, applying both supervised and unsupervised learning techniques.

AI Internship

Mar 2025 - Apr 2025

National Telecommunication Institute

- Gained hands-on experience with cutting-edge AI algorithms and models, including deep learning (CNNs, RNNs, Transformers), reinforcement learning, and NLP techniques.
- Strengthened foundational knowledge in machine learning, neural networks, and data preprocessing while applying them to real datasets.
- Worked with industry-standard tools such as Python, TensorFlow, PyTorch, and scikit-learn to build, train, and optimize AI models.

Software Engineer

Aug 2022 - Jan 2023

Upwork

- Built ML models that improved prediction accuracy by 30%.
- Optimized data pipelines, reducing processing time by 16.7%.
- Developed data-driven applications, increasing client efficiency by 12%.
- Designed and deployed 5 AI-powered chatbots, improving customer response time by 23%.

Projects

Self-Learning Half-Cheetah

Oct 2022 - Jan 2023

Implemented Augmented Random Search (ARS) for reinforcement learning, optimizing policy space with finite differences. Achieved 15x speed improvement over gradient-based methods and adapted the model to PyBullet environments for versatile applications. Based on Mania et al. research.

World Models Implementation

Jul 2022 - Sep 2022

Implemented a Hybrid AI Model based on World Models by Ha & Schmidhuber, combining Deep Learning, Reinforcement Learning, and NeuroEvolution. Utilized CNNs, RNNs, VAEs, and Evolution

Strategies to optimize agent behavior in OpenAI Gym environments, achieving superior performance.

Neural Network-Based Q-Learning Model

Feb 2022 - Mar 2022

Developed a Simple ANN for Q-learning, predicting action values and optimizing decisions using a loss function. Implemented Softmax action selection for balanced exploration-exploitation. Built an interactive environment using Kivy, enhancing model training and evaluation.

Core Skills

Technical Skills: Data Visualization, Data Cleaning, Natural Language Processing, SQL, Python, Linux, Deep Learning, Data Science, CUDA, Concurrent Programming, Parallel Programming

Soft-Skills: Critical Thinking, Problem-Solving, Time Management, Communication, Adaptability, Self-Motivation, Collaboration & Teamwork

Education

El- Shrouk Academy

Sep 2019 - May 2023

Bachelor Degree Computer Science

Languages

Arabic (Native), English (Professional Working)

Certificates

Machine Learning Nano-Degree

Jan 2024

Udemy

Deep-Learning Specialization

Feb 2024

DeepLearning.AI

Natural Language Processing Specialization

Apr 2024

DeepLearning.AI

GPU Programming Specialization

Nov 2024

Johns Hopkins University

HCIA-AI

Apr 2025

Huawei Talent