Mostafa Abbas Saad

+20 1507602076
mostafa.a.s075@gmail.com | LinkedIn
Cairo, Egypt

Summary

Junior AI & Data Science Specialist | NLP, Computer Vision & Generative AI Enthusiast

An Artificial Intelligence student with over two years of hands-on experience in computer vision and data analysis. Specializing in Deep Learning with strong foundations in Natural Language Processing (NLP) and its applications in text analysis, sentiment classification, and information extraction.

Proficient in working with Large Language Models (LLMs) such as GPT, BERT, and T5, leveraging Transformers for language understanding and generation.

Experienced in Computer Vision using models like YOLOv8, YOLOv5, ResNet, EfficientNet, and VGG16, with practical knowledge in object detection, classification, and OCR tasks.

Also familiar with Generative AI techniques such as GANs and Diffusion Models.

Highly skilled in Python and data analysis libraries like Pandas and NumPy, capable of building robust AI pipelines and delivering practical, data-driven solutions. Passionate about applying AI to solve real-world problems and support intelligent decision-making.

Education

Bachelor's Degree in Computer Science & Artificial intelligence — Sep 2023 – Jul 2027 — Arab open University

Work Experience

- **Microsoft Student Club – Tech Member**

- **Contributed to technical discussions and workshops on emerging technologies. • Collaborated with peers on innovative projects utilizing Microsoft tools.**
- **Expanded knowledge in AI, cloud computing, and software development through hands-on activities.**

• Projects

• **Machine Learning Classification System**
Built a classification system using multiple ML algorithms with a Tkinter-based GUI; improved accuracy through feature selection and data analysis.

• **Deep Learning Algorithms Analysis**
Implemented and evaluated deep learning models using TensorFlow and PyTorch, focusing on architecture changes and hyperparameter tuning.

• **Image Processing Tool**
Developed an application with edge detection, filtering, and segmentation; built a user-friendly GUI using Qt5.

• **Blood Cell Classification using Computer Vision**
Created a deep learning model using ResNet, EfficientNet, and VGG16 to classify blood cells, integrated into a Qt5 GUI with preprocessing and fine-tuning.

• **Arabic ↔ English Machine Translation System**
Built a bilingual machine translation model using Transformer-based architectures to translate between Arabic and English.

• **YOLOv8-based Vehicle & License Plate Detection**
Developed a dual-model system using YOLOv8l to detect vehicles and license plates in traffic videos, trained on a custom COCO-format dataset.

• **Ninja AI - Student Chatbot**
Developed a lightweight chatbot assistant to help Computer Science students explore and understand various software-related fields and specializations, providing clear explanations for each.

Skills

- ✓ **Programming: Python (OOP).**
- ✓ **Machine Learning & AI: TensorFlow, PyTorch, Scikit-learn, Open CV.**
- ✓ **Data Science: Data Analysis, Modeling, Visualization.**
- ✓ **Natural Language Processing (NLP): Text Analysis, Sentiment Analysis, Transformers, LSTM, GRU, Large Language Models (LLMs).**
- ✓ **Computer Vision: Image Classification, Object Detection, Segmentation.**
- ✓ **Generative AI: GANs, Diffusion Models, Text & Image Generation.**
- ✓ **GUI Development: Qt5, Tkinter.**
- ✓ **Data Structures & Algorithms: Arrays, Linked Lists, Trees, Graphs.**