Hossam Fares Alsayed Metwally

Computer Science Engineer, Teaching Assistant at BFCAI

General info:

Address: Shubra Al-Khaymah, Cairo, Egypt Phone: (+20) 1114652236 / 1017373239 Gmail: hossamfares180100@gmail.com academic: hossam.fares@fci.bu.edu.eg

LinkedIn: Hossam Fares

GitHub: https://github.com/hossamFares180100

Date of Birth: 06/05/2000

Professional Summary: -

Motivated computer science graduate and MSc student with a strong foundation in AI, Android development, and machine learning. Proven experience as a Teaching Assistant and developer of multiple AI-powered mobile and deep learning applications. Constantly seeking opportunities to integrate AI into real-world applications, especially within Android systems.

Work Experience: -

Teaching Assistant - Faculty of Computers & Artificial Intelligence (Full)

Sep 2022 – Present

- Assist in course preparation, grading, and curriculum development.
- Mentor students in programming, data structures, AI, and software engineering.
- Led lab sessions to facilitate practical application of theoretical concepts.
- Contribute to academic research with a focus on Generative AI and machine learning.
- Provide academic support and consultation to improve student outcomes.
- provided practical training in Flutter and AI

. Courses Taught: -

- NLP third year cs (2022-2023) 2'nd term
- Distribution System fourth year cs (2022-2023) 2'nd term
- Information storage third year (medical) (2022-2023) 2'nd term
- Design and analysis algorithms second year (network) (2022-2023) 2'nd term
- Data visualization fourth year is (2023-2024) 1'st term
- Mobile application fourth year cs (2023-2024) 1'st term
- Data mining fourth year (medical) (2023-2024) 1'st term
- Design and analysis algorithms second year (security) (2023-2024) 1'st term
- Computer vision fourth year cs (2023-2024) 2'nd term
- Data science fourth year cs (2023-2024) 2'nd term
- Design and analysis algorithms second year (network) (2023-2024) 2'nd term
- Design and analysis algorithms second year (network) (2024-2025) 2'nd term
- Design and analysis algorithms second year (2024-2025) 2'nd term
- Data science fourth year cs (2024-2025) 2'nd term

. Graduation projects supervision: -

- Interactive E-learning platform powered by AI CS24-05 (2023-2024)
- Check Up CS24-06 (2023-2024)
- Recognize injured people using computer vision CS24-28 (2023-2024)
- Fire and Smoke Detection in Images and Videos (2024-2025)

Education: -

MSc Computer Science

Faculty of Computers & Artificial Intelligence, Benha, Egypt

Sep 2023 – Present

BSc Computer Science

Faculty of Computers & Artificial Intelligence, Benha, Egypt

Sep 2018 - Sep 2022

- Accumulative Rating: Excellent with Honor (90.8%).
- Major: Computer Science.

Erasmus+ Scholarship in Computer Science

Faculty of information technology, Pannonia, Hungary

Sep 2024 – Feb 2025

• Participated in an international exchange program focused on advanced computer science studies.

Technical Skills: -

• Machine Learning & AI: TensorFlow, Scikit-learn, Keras, Deep Learning, Supervised/Unsupervised Learning, NLP.

• **Programming Languages**: Python, Java, C++, MySQL.

• Mobile Development: Android Studio (Java), Flutter, Firebase

• Data Analysis & Visualization: NumPy, Pandas, Seaborn.

• Tools: Jupyter Notebooks, VS Code, Spyder.

• Other: Data Preprocessing, Model Evaluation, Feature Engineering.

Courses and certifications: -

HUAWEI -HCIA-AI TTTC8, AI Course.

Oct 2022

NTL Java Programming Specialization, Java Course.

Jan.2020

Python IEEE Courses Data Camp Python Course (Online).

Sept 2020

<u>Android IEEE Courses</u> <u>Android Udacity Course</u> <u>Android Udemy Course</u> Android Course (Online).

2020-2021

Cisco CCNA V7, Introduction to Networks.

Feb 2022

Projects: -

Deep-Learning-Models-for-Classification: -

- **Brain Tumor Classification** Developed a deep learning model for accurate classification of brain tumors using medical imaging to assist diagnostic processes. [GitHub Link]
- **Retinal OCT Classification** Created a deep learning system to classify retinal OCT scans, enabling early detection of various eye diseases. [GitHub Link]
- **Skin Cancer Classification** Implemented AI models to classify skin lesions and identify potential skin cancers, supporting early diagnosis and improved healthcare outcomes. [GitHub Link]
- Chat with Your Documents (LLMs) with Hugging Face & Tkinter Built an AI-based system using Hugging Face models for chat with your documents, integrated with a Tkinter GUI for user-friendly interaction and validation of input pdf. [Github Link]
- **Jaw Types Classification** developed an AI-based classification model to automatically identify jaw alignment types, including prognathic, retrognathic, and normal. [GitHub Link]
- **Heart Beat Classification** developed an AI model to classify heartbeat signals into Fusion, Supraventricular, Ventricular, and Normal categories. [GitHub Link]

NLP Projects: -

- Arabic Offensive and Toxic Comments implemented a natural language processing (NLP) model for detecting offensive and toxic language in Arabic social media comments. [GitHub Link]
- English Offensive and Toxic Comments implemented an NLP-based classification model to detect offensive, toxic, and abusive language in English comments. [GitHub Link]
- **Disease Diagnosis Chatbot** Designed and implemented an AI-powered chatbot for preliminary disease diagnosis. The system interacts with users through natural language, collects symptom data, and suggests possible conditions using a rule-based or machine learning backend. [GitHub Link]

Computer Vision Projects: -

• Pose Estimation, Object Detection (YOLO), UNet Segmentation All available on GitHub.

Android Development Projects: -

- **DrCare (Graduation Project)** Developed a healthcare application with features to assist patients and medical staff. [GitHub Link]
- DailyNews Created a news aggregation app for Android providing up-to-date news content. [Github Link]
- Messenger App Built a real-time messaging application using Android technologies. [Github Link]
- **EasyCare App** a medical diagnosis app that uses Prolog to identify diseases based on user symptoms. [Github Link]
- **Notes App** developed a Notes App that allows users to create, edit, delete, and organize notes. [Github Link]

Skills: -

- English: Very Good.
- Proficient in MS Office.
- Academic Support.
- Research Assistance.

- Team Work & Collaboration.
- Critical Thinking & Solve Problems.
- Time Management.
- Leadership.