Mahmoud Mohamed

RAK, United Arab Emirates +971 529968954
National ID–Number: 784-2001-2763204-8 Email:
Mahmoud 2001M@outlook.com
LinkedIn: doublem70 | GitHub: DoubleM01

LinkedIn https://www.linkedin.com/in/doublem70/

GitHub https://github.com/DoubleM01

Website: https://doublem01.github.io/DoubleM/

SUMMARY

With two years of specialized experience in artificial intelligence and four years in software engineering, I've honed my skills during my academic journey. My passion for programming ignited in high school, where I embarked on innovative software projects, securing numerous accolades. One of my most notable achievements was developing a drone equipped with a comprehensive software and monitoring system, which secured a commendable second place in the software category at the Intel ISEF Egypt Competition in 2018.
Throughout my academic career, I actively engaged in freelancing projects and contributed to the early stages of a Smart Home startup. By providing AI-driven solutions tailored to market demands, I played a pivotal role in shaping the startup's success. Additionally, I gained international experience by working on cutting-edge deep learning projects in Singapore.

Beyond my technical pursuits, I actively participated in student leadership, serving as the Head of the Technical Committee for IEEE BUE – Student Branch. After graduation, I continued my involvement with the branch, imparting my knowledge as a course instructor, teaching courses such as Dynamic Programming. My expertise encompasses deep learning, computer vision, and embedded AI systems, effectively bridging the gap between academic research and realworld industry applications.

Proficient in both Arabic (my native language) and English, I hold a First-Class honors degree from the esteemed British University in Egypt (BUE).

TECHNICAL SKILLS

Projects types: Computer Vision, NLP, Deep learning, Machine Learning, Desktop software development & cross platform app development (mobile),

Programming Languages: Python, C#, C++, SQL, MATLAB

Deep Learning Frameworks: TensorFlow, PyTorch, Keras, scikit-learn

Libraries & Tools: NumPy, Pandas, Scikit-learn, Open-CV, Matplotlib, Selenium, Beautiful-Soup, Tkinter, YOLO, Media-pipe, SMPL-X,

Embedded & Integration tools : NVIDIA Jetson, Raspberry Pi, ESP32, Arduino, Proteus, Embedded Design

Others technical skills: anomaly detection, supervised learning, unsupervised learning, data pre-processing, image processing, system optimization, statistics analysis, AI-based sports analysis, AI-based medical analysis, CUDA & GPU acceleration for AI

Cloud skills: Google Colab, Google Cloud, Amazon Web Services (AWS)

Soft Skills: Communication skills, Problem Solving, Teamwork, Planning, Networking, Cross-Field Integration, Adaptability, Hard Working

PROJECTS

Detection of Spine Deformities using Deep Learning Models Sept 2023 – June 2024

Deep Learning Medical Project (GitHub) *Python, Roboflow API, Open-CV*

- Graduation Research Project at British University in Egypt (BUE)
- Developed a machine learning model for diagnosing lumbar spine deformities
- Achieved Grade: A+ for project excellence and innovation

Multi-Purpose Virtual Fitting Room Sept 2023 — June 2024

Deep Learning Project *Python, SMPL-X, Media-Pipe, YOLO, Open3D, Open-CV, Blended API, Easy-Mocap*

- Graduation Design Project at British University in Egypt (BUE)
- Designed an AI-driven virtual fitting room that generates 3D previews of clothes fitting on the user, with size recommendations based on the user's measurements
- Achieved Grade: A+ for the unique approach to virtual retail

Speed Sign Detection Project July 2024

Deep Learning Project (GitHub) Python, TensorFlow, CNN, Open-CV

- Built a CNN model to classify speed limit signs from images
- Processed a dataset of speed sign images, trained the model, evaluated performance, and made predictions on new images
- The model distinguishes between various speed limits and provides real-time feedback, useful for autonomous driving applications.

More projects: GitHub repositories https://github.com/DoubleM01?tab=repositories

EXPERIENCE

AI Research Intern July 2023

Nan-Yang Polytechnic (NYP) *180 Ang Mo Kio Ave 8, Singapore*

- Developed a deep learning-based gait detection project, improving biomedical engineering capabilities.
- Optimized model performance and ensured data quality
- Compared with previous work and performed accuracy

Software Engineering Intern June 2022 – Aug 2023

Khater Sports *Nasr City, Egypt*

- Led research and development of software prototypes and applications, specifically for sports technology.
- Implemented and evaluated middle-ware scoreboards system
- Developed a mobile application integrated with an embedded scoreboard using the designed middle-ware system.

Technical coordinator Sept 2021 – March 2024 *IEEE BUE - Student Branch* *Al Shorouk City, Egypt*

- Leaded the technical department at IEEE student branch
- participated with IEEEBUE team in IEEEXtreme Competition 16.0 and globally ranked in the top 500
- involved in interviewing procedures as technical interviewer

EDUCATION

British University in Egypt (BUE) — London South Bank University Dual Certificate Cairo, Egypt
B.Sc in Computer Engineering *Sept 2019 -– June 2024*
• UK Certification: Grading of First Class

• EG Certification

CERTIFICATIONS

• Artificial Intelligence Training Program – Zewail City of Science and Technology, Nov 2023

• Building Deep Learning Models with TensorFlow – IBM, Sept 2023

• Introduction to Computer Vision and Image Processing – IBM, June 2023

• More certificates on Website: https://doublem01.github.io/DoubleM/