Yousef Ibrahim Gomaa Mahmoud

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Summary

A student in the Artificial Intelligence and Data Science (AID) program at Egypt-Japan University of Science and Technology. Interested in data science, blockchain (web3) technology, and software development. Details of relevant work can be found in this portfolio and on this LinkedIn profile.

Experience

Machine Learning Trainee at Information Technology Institute, Summer Camp. August, 2023

- Participated in machine learning projects focusing on supervised and unsupervised learning models which were designed, and evaluated using Python libraries such as scikit-learn and TensorFlow on real world problems.
- Collaborated within a group in data preprocessing and feature engineering, ensuring smooth integration and optimization of machine learning workflows as well as a final project summarizing all of our work.

Software Development Intern at iAppsBeats, Indie Game Company. July, 2018 - December, 2021

- Contributed to scripting, graphics design, testing, deployment, and analysis.
- Wrote, debugged, and tested scripts using JavaScript to implement game mechanics and character behaviors.
- Assisted the design team to integrate visual assets with pre-existing features, ensuring seamless implementation and optimization.
- Worked remotely on several game projects such as Ethereum, Corleone and Avalonia.

Projects

Attention (National Hackathon - 3rd Place Winner) Hackathon, Link to Project

Attention is a desktop application designed to assist individuals with cognitive disabilities, such as ADHD, in their pursuit of education. Implemented an eye-tracking system with a pre-trained CNN to monitor and enhance focus during study sessions. This system dynamically assesses visual attention and provides real-time notifications to maintain concentration. Designed for ADHD users, it features clear task hierarchies, minimized distractions, and time visualization. The app supports desktop and mobile, offering customization, accessibility, and data privacy, with a secure system that rewards users with cryptocurrency. Tools used include Kivy, Ganache, Brownie, Solidity, Python, OpenCV, and PDFMiner.

SIGN CHAT (TAQADDAM Regional - 3rd Place Winner) TAQADDAM

SIGN CHAT was a phone application project that transformed written natural languages (e.g., English) into a series of ASL gestures displayed on a grid and vice versa. The development included plans to use computer vision for real-time detection of hand and facial gestures through the camera. Additionally, the application featured mini-games designed to help users guess and learn ASL gestures, making the learning process interactive and engaging. SIGN CHAT aimed to assist individuals with special needs, particularly those who are deaf or hard of hearing, by providing a practical tool for communication and learning.

Education

Fall, 2024	Exchange Student, School of Engineering at **Hiroshima University**	(GPA: ?/4.0)
2021 - 2025	Bachelor's Degree of Artificial Intelligence and Data Science at **Egypt-Japan University of Science and Technology**	(CGPA: 3.77/4.0)
2019 - 2021	High School Diploma at **Mohamed Korayem Language Schools**	

Volunteering Experience

IEEE Head of Artificial Intelligence and Machine Learning Committee Fall, 2023 - Spring, 2024
at Egypt-Japan University of Science and Technology, IEEE Student Branch

Instructor of the "Fundamentals of Artificial Intelligence, Machine Learning, and Neural Networks" technical course at Egypt-Japan University of Science and Technology (E-JUST), held during Fall 2023 and organized by IEEE E-JUST Student Branch.

Skills

Technical Skills	C++, C, C, R, Python, JavaScript, HTML (and CSS), GDScript, Assembly, AVR Assembly, Arduino C, MATLAB, and Bash. (includes common/daily usage of Linux, especially Archlinux)
Database Management	MySQL, MariaDB, SQLite, Oracle SQL, PostgreSQL and Decentralized Blockchain Storage Architectures.
Natural Language Skills	Arabic (Native), English (C1), and Japanese (N4).