Ali Elneklawy
LinkedIn, Portfolio
Email : ali.mostafa.elneklawy@gmail.com
Mobile : +201125823588

Education

- **Faculty of Engineering** — Alexandria University
  Bachelor of Engineering in Communications and Electronics; GPA: 3.3 — *Aug. 2019 – June. 2024*

Relevant Coursework

- Programming (Python)
- Data Structures and Algorithms
- Operating Systems
- Database Management
- Advanced Probability and Statistics
- Machine Learning
- Deep Learning
- Convolutional Neural Networks
- Version Control (Git)

Experience

- **Ministry of Communications and Information Technology** — Hybrid
  AWS Machine Learning Trainee — *May 2024 - Dec 2024*
  - **Prompt Engineering**: Completed training on prompt engineering techniques.
  - **AWS Academy Cloud Foundations**: Learned fundamental AWS cloud concepts and services.
  - **AWS Academy Cloud Architecting**: Studied the architecture of cloud solutions using AWS.
  - **AWS Academy Machine Learning Foundations**: Studied foundational concepts in machine learning and practices on AWS.
  - **AWS Academy Machine Learning for Natural Language Processing**: Studied machine learning techniques specific to natural language processing.
  - **MLOps Tools, MLflow, and Hugging Face**: Explored MLOps tools including MLflow for managing the ML lifecycle and Hugging Face for NLP models.
- **BCAITECH (مركز البحرين لتقنية المعلومات والذكاء الاصطناعي)** — Remote
  Remote Chatbot Developer — *Dec 2024 - March 2025*
  - **Role Overview**: Develop and maintain advanced chatbots—primarily for WhatsApp—while providing best practices guidance to management.
  - **WhatsApp Chatbot Development**: Designed and implemented custom chatbots integrated with WhatsApp, delivering efficient, natural conversations tailored to client needs.
  - **Best Practices Advisory**: Provided strategic insights and best practices for chatbot development, continuously improving project quality and performance.
  - **AI-driven Live Chat System**: Implemented an AI-driven project that combines natural language processing with web crawling to deliver real-time, context-aware responses on the company website. Implemented automated retraining mechanisms to ensure the system remains updated with the latest site data, enhancing user interaction and information retrieval.

Projects

- **Braille Translator (Graduation Project)**: Participated in the development of a system capable of converting scanned Braille images into English text and audio books. Achieved an accuracy rate of 99%.
- **Real Time Face Mask Detection**: Developed a computer vision project that uses deep learning techniques to detect if a person is wearing a face mask in real time. Achieved 93% accuracy.
- **Real Time Sign Language Classification**: Developed a machine learning model to translate sign language letters into English letters.
- **WebRAG - Retrieval-Augmented Generation for Website Interaction**: Developed an AI-driven system that integrates natural language processing with web crawling to provide real-time, context-aware responses to user queries based on website content.

* **AI Programming Coach - Telegram Bot**: Developed an AI-driven Telegram bot that enhances users' programming skills through personalized assessments and daily coding challenges. The bot dynamically evaluates user proficiency, provides tailored exercises, and integrates AI-based question answering. Implemented database management, automated task scheduling, and admin controls for question management. Deployed on AWS for scalability and continuous availability.
* **Intelligent Telegram Chatbot with Custom Knowledge Base**: Developed a sophisticated Telegram chatbot powered by Google's Gemini AI, designed as a virtual personal assistant. The bot integrates a website crawler, document processing, and advanced text embeddings to provide intelligent, context-aware responses based on personal knowledge bases, including websites, documents, and custom data sources.
* **AI-Powered HR Assistant**: Developed an intelligent HR assistant chatbot leveraging Google Gemini-Pro for advanced NLP, Sentence Transformers for document embeddings, and Gradio for an interactive user interface. The chatbot streamlines HR processes by handling queries, managing leave requests, generating HR analytics, and providing a user-friendly experience with real-time data visualization.
* **Chatbot**: Implemented an AI chatbot using Tensorflow with a user-friendly GUI using Gradio. The project was deployed on Hugging face. Achieved 97% accuracy in comprehending user input.
* **Boston House Price Prediction**: A machine learning model that can be used for housing price prediction deployed using streamlit on Hugging face.
* **Spam Filter**: Built a highly effective spam filter using machine learning techniques. Achieved an accuracy 98%.
* **Malware Detection from Memory Dump**: Implemented a deep learning model to detect whether or not a specific device is infected and if it is infected, determine the type of malware. Achieved an accuracy of 99%.
* **Diabetes Predictor**: Built a machine learning model that can be used to predict whether a patient is diabetic or not based on several factors.
* **PDF Text to Speech**: A GUI-driven application that can be used to convert PDF files to audio files with each page converted separately to an audio file.
* **PintOs**: Contributed to the development of PintOs, an open-source instructional operating system kernel developed by Stanford university.

Programming Skills

* **Languages**: Python, Maltalb, C, SQL
* **Developer Tools Technologies and Frameworks**: Pandas, NumPy, Matplotlib, Qt, Scikit-Learn, TensorFlow, Keras, Git

Personal Skills

* Teamwork, Self-learner, Time Management, Presentations