

ABDULMUNAIM SALEH MAHFUDH

80100📍 Mombasa, Kenya 📞 +254 750965565 / +254 745349933
✉️ abdulmunim.swaleh20@gmail.com

Education

University of Near East <i>Candidate for Master in Artificial Intelligence Engineering.</i> <ul style="list-style-type: none">● Relevant Curriculum: Specialized in AI models, cloud computing, and blockchain research.● Relevant Coursework and Research: Conducted research in AI and blockchain, including a thesis on predicting grades and CGPA using various models to determine the best accuracy <i>Candidate for Bachelor of Computer Engineering.</i>	February 2023 – June 2024 Cyprus, TR
<ul style="list-style-type: none">● Relevant Curriculum: Focused on cybersecurity theory, basic Cisco networking, and software engineering principles.● Relevant Coursework: Gained foundational knowledge in securing digital systems and introductory programming, preparing me for IT support and system administration roles.	February 2019 – January 2023 Cyprus, TR

Experience

- Near East University – March 2023 to June 2024**
Research Assistant (Artificial Intelligence and Robotics Institute)
- Researched the latest AI methodologies and techniques.
 - Authored academic papers on AI-related topics.
 - Designed and implemented machine learning algorithms to predict students' grades and CGPA based on historical data built with python used libraries like numpy etc..
 - Provided technical support, addressing both hardware and software issues.
 - Conducted a project on drone detection using MaskRCNN(MobileNet) and MaskRCNN(ResNet-50).
 - Presented findings at a conference.

Projects

Skills

- Python (Bash, powershell), Vue.js, Node.js
- Flask
- Creation of simple chatbots
- Web Development: Basic Frontend coding development with HTML, CSS, and JavaScript; website creation using WordPress.
- Database Administration: Proficient in MySQL and Mongo DB.
- Artificial Intelligence: AI methods and models creation using Python.
- Version Control: Experience with GitHub and GitHub Desktop.
- Operating Systems & Commands: Linux Terminal Commands; administration of devices and systems (Windows Server, Linux).
- Networking: Configuration and management of routers and switches.
- Virtualization: Proficient in VMware
- Technical Support: Troubleshooting hardware/software issues; General IT support.

Mombasa County Chatbot Project

- Developed a chatbot integrated with Mombasa County's e-services, capable of answering user queries from a corpus stored in a text file.
- Utilized a Flask backend with a Vue.js frontend, integrating machine learning techniques like TF-IDF and cosine similarity for response generation.
 - Deployed on Streamlit and implemented fallback mechanisms for unrecognized queries.
 - Enabled seamless integration into a website through iframe implementation.
 - Planning to integrate it with Mombasa county web app.

Grade and CGPA Prediction System (THESIS PROJECT)

- Developed a machine learning-based system to predict student quiz grades and Cumulative Grade Point Average (CGPA) using Python and Scikit-learn.
- Trained models on historical academic data, achieving high prediction accuracy, with deployment on the Prof. Dux AI-powered learning platform.
- Utilized various algorithms, including Linear Regression and Random Forest, to identify at-risk students and provide insights for personalized interventions.
- Implemented the system in Google Colab, integrated with a web app for real-time predictions.

Hand Gesture Detection Model

- Designed and implemented a real-time hand gesture detection system using **OpenCV**, **TensorFlow/Keras**, and **Mediapipe**.
- Built a Convolutional Neural Network (CNN) model to classify various hand gestures, achieving high accuracy for gestures like "thumbs up" and "peace sign."
- Integrated real-time video processing for gesture detection through webcam input, with preprocessing techniques such as background subtraction and skin segmentation.
- Deployed the system for use in touchless interfaces and sign language recognition applications.

<https://github.com/Abdulmunimsaleh?tab=repositories>