## Mohamad Mustafa Abdulkadir

Bachelor of Science in Computer Science

GPA: 3.97

Dean's List Award: Fall 2022, Spring 2023, Spring 2024, and Fall 2024

**Experience** 

#### **ADIA Lab**

June 2025 - August 2025

ML Research Intern

Abu Dhabi - UAE

- Developed a transformer-based encoder to predict in-hospital mortality from 48x76 multivariate EHR time-series data, achieving high AUROC and Recall.
- Implemented attention and gradient-based methods to track feature importance.
- Built a ground-truth report generation pipeline that converts raw EHR sequences into structured text summaries and curates them using an LLM.
- Working on fine-tuning an LLM for clinical report generation and exploring alignment approaches to ensure factual grounding and accuracy.

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AI Intern

January 2025 - April 2025

Dubai - UAE

• Worked on integrating an AI-powered content recommendation tool with the Starz On

- Business platform
  Developed a bespoke chatbot for Starz On Business to automate tier-1 customer support
- Developed a bespoke chatbot for Starz On Business to automate tier-1 customer support cases using the platform's guides and FAQs

#### Research Projects

#### **United Arab Emirates University - SURE+ Grant**

June 2024 - January 2025

- Researched the use of artificial intelligence in task classification and allocation in mobile crowdsensing platforms
- Developed techniques to generate synthetic training data for task classifiers
- Introduced a task classification approach based on a combination of machine learning models and filtering algorithms

### Advanced Technology Research Council - STEM Youth November 2023 - September 2024 Mentorship Program

- Researched non-stationary contextual-bandit algorithms and large language models for recommender systems
- Worked on introducing change-point detectors to contextual bandit algorithms to enhance performance in stochastic environments and fine-tuning large language models for recommendation tasks

### Selected Projects

### Implementing Sliding-Window LinUCB and Discounted LinUCB algorithms

• Implemented the algorithms proposed in "On Upper-Confidence Bound Policies for Non-Stationary Bandit Problems" using Python and reproduced the results

### Fine-Tuning Large Language Models

- Fine-Tuned Llama 2 7b LLM on an unstructured dataset
- Utilized Amazon Sagemaker and other AWS tools to fine-tune and deploy the model

## **Automated Attendance System**

- Fine-tuned YOLOv8 for face detection
- Fine-tuned EfficientNet for face recognition to obtain face embeddings
- Deployed the system using Stremlit

## Publications

## DoS-based Fake Task Injection for Disrupted Sensing (Accepted)

AICCSA, 2025

Mohamad Abdulkadir, Hanane Lamaazi and Ruhul Amin Khalil

Vault-PMS: A Vault-Based Password Management System for Secure Offline Data Storage IWCMC, 2024

M. Abdulkadir, S. Alketbi, H. Lamaazi, R. Altamimi, S. Alblooshi and A. Lakas

#### Open-Source Contributions

# Deep-ML: Leetcode-style problems for machine learning and linear algebra

### Certifications

### Samsung Innovation Campus Artificial Intelligence Course

November 2024

Samsung

# AI Programming with Python Nanodegree

October 2024

Udacity

### Introducing Generative AI with AWS

**July 2024** 

Udacity