# Dhiyaa Al Jorf

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## EDUCATION

# New York University Abu Dhabi (NYUAD), Abu Dhabi, UAE

Bachelor of Science in Computer Engineering

August 2021 - May 2025 Current GPA: 4.0/4.0

• Studies included full year at NYU Tandon School of Engineering & short-term stay at NYU Paris

# Rehabilitation Engineering

## **Capstone Project**

Reliable and Intuitive Multi-modal Prosthetic Closed-Loop Control System within VR simulation environment.

Center for Artificial Intelligence and Robotics (CAIR) | Research Assistant February 2024 - Present Current Project: Uncertainty Quantification for Breast Cancer Diagnosis & Prognosis Completed Project: Single-Grid Hand Gesture Recognition Leveraging Agonistic-Antagonistic Coactivation

- Designed & trained sEMG-based hand gesture classification models with 95% accuracy.
- Utilized XAI visualization techniques to identify important channels contributing to model predictions.
- Conducted ablation studies to evaluate the impact of dropping specific channels on model performance.
- Co-first authored paper currently in process to be reviewed for IEEE RA-L journal.

# Applied Interactive Multimedia (AIM) Lab | Research Assistant

- Designed & Implemented a full-stack application for custom rehabilitative system
- Developed & tested a set of occupational therapy games aimed at post-stroke patients according to established procedures with advice from physicians at Cleveland Clinic Abu Dhabi
- Modified the games to assist children in acquiring handwriting skills with advice from education professionals at Cranleigh Schools Abu Dhabi

# INTERDISCIPLINARY CHALLENGES

September 2024 - Present **Team Triton** | Computer Engineering Team Responsible for realistic & simulated synthetic data generation for Computer-Vision-based robot controller

eBrain Lab LLM Fine-Tuning Competition | First Place September 2024 LLM Fine-tuning competition scored on model size and performance on a medical MCQA task.

**IEEEXtreme 17.0 Competition** | *Third Place in the UAE* Top 10% in the Middle East

# **NYUAD.SPACE** | Research Assistant

Hold-Down Release Mechanism (HDRM) - JUCI:

- Designed, developed, and tested reusable HDRM for the Jet Propulsion Lab (JPL) as part of the JPL University Crowdsourcing Initiative (JUCI)
- Presented HDRM design at JPL headquarters in Los Angeles, California

## Haloship:

- Successfully launched Project Haloship in the Spaceport America Cup 2023
- Designed, developed, and simulated internal skeleton of Haloship
- Designed, developed, and simulated reusable recovery subsystem for project Haloship.
- Won the Dr. Gil Moore Aware for Technical Innovation for the design of the recovery subsystem

#### **IEEEXtreme 16.0 Competition** | Fourth Place in the UAE

February 2022 – July 2022

October 2023

August 2022 - June 2023

August 2024 – Present

September 2024 – Present

# Community Involvement

#### Afghanistan Female Student Outreach (AFSO) | Teacher Assistant

- Taught weekly recitation sessions for differential calculus class.
- Hosted weekly office hours to assist students.
- Helped manage the Google Classroom environment & relay information to students.

# Habitat For Humanity, Bayt Eidis, Jordan | Volunteer

- Volunteered in Jordan as part of NYUAD's Engineers for Social Impact (EfSI) program to assist in constructing houses and community spaces for the underprivileged families of Bayt Eidis.
- Conducted an ethnography report of the Bayt Eidis community

## Mangrove Plantation Initiative | Volunteer

More than 100 NYUAD community members planted 5,000 mangrove trees in under an hour as part of the University's commitment to sustainability and environmental conservation

# Sports & Physical Activity

Indoor Rock Climbing Twice a week	October 2021 – Present
Ice Skating Twice a week in New York winter. Every other week in Abu Dhabi	December 2023 – Present
Badminton Twice a week	August 2024 – Present
<b>NYUAD Athletics</b>   <i>Climbing Wall Supervisor Assistant</i> Assisted in supervising sessions, organizing events, and equipment maint	August 2022 - June 2023 enance
Dabke Cultural Dance team under a Cultural Student Interest Group (SIG) at performances in different SIG events.	September 2021 – Novermber 2022 NYUAD. We had multiple
Arts	

**DoodlyFox** | Art Website Skills: Digital Illustration, Still-Life Drawing, Clay Sculpting, Sewing & Embroidery

The NYUAD Gazelle Newsletter | Illustrator

# CULINARY

**FoodieFrog** | *Recipe Website* A fun corner of my website where I share my favorite recipes.

## **Community Lunch & Iftars**

August 2023 – June 2024 During my study away in New York, I organized weekly group lunches (and iftars during Ramadan) for NYUAD study away community members.

March 2023

November 2022

September 2022 – December 2022