

# Omar Rayyan

olr7742@nyu.edu |  LinkedIn |  GitHub |  Portfolio

## Education

---

**New York University Abu Dhabi**  
*Electrical Engineering and Computer Science*

August 2021 - Present  
**GPA: 4.0/4.0**

## Publications

---

**RCM-Constrained Manipulator Trajectory Tracking using Differential Kinematics Control**  
*O.Rayyan, V.Gonçalves, N.Evangeliou, A.Tzes* December, 2023 [[Paper](#)]

## Experience

---

**General Robotics and AI Lab (GRAIL)**  
*Machine Learning Researcher*

Jan 2024 - Present  
*New York, USA*

  
*Software Engineering Intern*

July 2023 - Sep 2023  
*Munich, Germany*

- Developed an internal evaluation tool functionality for assessing changes in resource configuration controls before submission to the resource ranger. Design Doc: [go/rrconfigdiff](#)
- Worked as a member of the Infrastructure and Storage Team, which is responsible for managing resources and tasks across Google's global distributed systems.

**Center for AI and Robotics (CAIR)**  
*Robotics Engineering Research Assistant*

Sept 2022 - July 2023  
*Abu Dhabi, UAE*

- First authored a [paper](#) on RCM-constrained manipulator trajectory tracking in MIS that got accepted and published in the International Conference on Advanced Robotics (ICAR) 2023.
- Developing a ROS Algorithm for Precise Control of the KUKA iiwa-14 R820 Robot with Differential Kinematics while adhering to constraints.

**ProgressSoft Corporation**  
*Software Engineering Intern*

July - Sept 2021 & July - Sept 2022  
*Amman, Jordan*

- Worked on and fully developed a tool to be used for internal testing by banks all around the Middle East using Spring Java Framework
- Was involved in programming, documenting and testing applications, frameworks, and software components of Progresssoft ECC (Electronic Cheque Clearing) project using multiple Java EE technologies.

**Applied Interactive Multimedia Lab**  
*Engineering Research Assistant at AIM Lab*

February 2022 - July 2022  
*Abu Dhabi, UAE*

- Worked on the development of serious tasks for [KATIB](#), a handwriting assisting platform that provides contact-less kinesthetic feedback by utilizing magnetic forces. It helps post-stroke patients regain writing skills.

## Projects

---

[View More](#)

**Qatra**

iOS App

A platform connecting those in urgent need of blood units in Jordan with potential blood donors. Was featured on [Jordan News](#).

## Lebsi

[iOS App](#)

An app that enables people to set up online clothing stores. Reached #21 on App Store Top Charts and was used half a million time.

## A Fine Day

[Github Repo](#)

A gamified version of stroke rehabilitation allowing patients to regain their limbs functionality in an engaging environment by integrating VR (Oculus Rift) and hand-tracking (Ultraleap) devices.

## Past Code

[App Store](#)

An app that helps international students find supporting exam papers using their phone camera using Apple's vision framework. The app was used to scan over 500,000 papers from 64 different countries.

## Achivements

---

### International Conerence on Advanced Robotics (ICAR) 2023

December 2023

- Published a [paper](#) as a first author during my time at the Center of AI and Robotics of NYUAD.

### IEEEEXtreme Coding Competition

October 2023

- 3rd on the United Arab Emirates - Problem Solving

### Cambridge Assessment International Education

June 2020

- Top in Country in Physics International A-Level and Across 4 International A-Levels
- Top in Region Across 7 International GCSEs

## Skills

---

Machine Learning | C++ | Python | JavaScript | Go | Java | Swift | JSP | Servlet | Angular | Spring |  
MATLAB | React | FPGA | VHDL