Omar Rayyan

olr7742@nyu.edu | in LinkedIn | 🗘 GitHub | 🚱 Portfolio

EDUCATION

New York University Abu Dhabi

B.S in Electrical Engineering and Computer Science

August 2021 - Present

GPA: 4.0/4.0

WORK EXPERIENCE

Google

July 2023 - Present

STEP Engineering Intern

Munich, Germany

• Working as part of the infrastructure and storage team that manages resources and tasks running across Google's distributed systems worldwide.

Center for Artificial Intelligence and Robotics

Robotics Engineering Research Assistant

Sept 2022 - Present Abu Dhabi, UAE

- Developing a ROS Algorithm for Precise Control of the KUKA iiwa-14 R820 Robot with Differential Kinematics and Remote Center of Motion (RCM) Constraint Adherence in Minimally Invasive Surgery.
- Fabricating, and integrating novel robotic tools with trajectory planning algorithms to mimic invasive surgery movements.

ProgressSoft Corporation

Jul 2021 - Sept 2021 & Jul 2022 - Sept 2022

Software Engineering Intern

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 Progressoft ECC (Electronic Cheque Clearing) project
- Worked with multiple Java EE technologies including JSP and Servlets and used MVC design patterns

Applied Interactive Multimedia Lab

Engineering Research Assistant at AIM Lab

February 2022 - Present Abu Dhabi, UAE

• Working on the development of KATIB, a handwriting assisting platform that provides contact-less kinesthetic feedback by utilizing magnetic forces. It helps post-stroke patients regain writing skills through its easy-to-use software. It enables patients to perform physical tasks while receiving real-time feedback from their therapists.

PROJECTS

LEBSI November 2021 iOS App

Developer

LEBSI enables people and clothing brands to set up online stores in minutes. Hence, sellers no longer have to manage their stores across multiple social media platforms at the same time. Reached #21 on App Store Top Charts.

A Fine Day January 2021 DeveloperGithub Repo

A gamified version of stroke rehabilitation that allows patients to regain their limbs functionality in an engaging environment and therapists to remotely track patient progress. Target patients' range-of-motion and motor skills by integrating VR (Oculus Rift) and hand-tracking (Ultraleap) devices.

Qatra August 2021

 $\stackrel{ullet}{Developer}$ $iOS\ App$

Qatra is a platform that connects those in need of blood units in Jordan with potential blood donors. Once a user register, they will receive notifications when local and nearby hospitals request units similar to their type. Was featured on Jordan News.

Past Code
Developer

App Store

Past Code is an app that helps international students find supporting exam papers using their phone camera. Specific patterns are extracted from images to match their document with supporting papers. The app was used to scan over 500,000 papers from 64 different countries.

AWARDS

IEEEXtreme Coding Competition

New York University Abu Dhabi

October 2022

4th on the United Arab Emirates - Problem Solving

Cambridge Assessment International Education

Eastern Province

June 2020

Saudi Arabia and Jordan

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

SKILLS & COURSES

Coding Languages

C++ | Python | JavaScript | Go | Java | Swift | JSP | Servlet | Angular | Spring | MATLAB | React

Expertise

Data Structures | Algorithms | Databases | Discrete Math | Introduction to Machine Learning | Web-Development | App-Development | Competitive Programming | Distributed Systems