## **Hussain Bin Usman**

(+974)30186986 • Doha, Oatar•

hussainu@andrew.cmu.edu

### **EDUCATION**

### Carnegie Mellon University in Qatar | BSc in Computer Science

Undergraduate

### International School Lahore, Pine Avenue, Lahore

Advanced Level

June 2024

**June 2022** 

August 2025-May 2029

- 100% merit scholarship
- Coursework: Chemistry, Further Mathematics, Computer Science, Physics, Mathematics

#### Lahore Grammar School Muslim Town, Lahore

Ordinary Level (GCE)

- 8A\*s and 4 A's obtained
- Subjects: Chemistry, Physics, Mathematics, Biology, Additional Mathematics, Islamiyat, Pakistan Studies, English, Urdu, Statistics, Combined science and Environmental Management

### **EXPERIENCE**

## World Science Scholar 2024 (1 of 50 across globe)

June 2024-Present April 2024- Present

Ap

- Research Author, Lumiere Program

   With University of Pennsylvania
  - Enzyme Mimicking Nanoparticles: Advancing biochemical pathways and enhancing reaction kinetics

## Founder Scholium, MIT LaunchX

**April 2024- Present** 

An entrepreneurial platform for Cognitive development of specially-abled toddlers, aged 1-7.

## **National Youth Council 2024**

## Research Assistant, Lahore University of Management Sciences

January 2022 - Present

- Conjugation of Glucose with Nanoparticles under the influence of ultrasound to treat cancer with a novel approach.
- Only High Schooler amongst a group of university students , under the chair of life sciences lab, Dr. Safee Chaudhary

#### Author Review Paper, Polygence-Globally recognized online research Platform

June 2023 - Present

- Author: Future Cancer Diagnostics Review
- Advancing Novel Physicochemical Approaches for the Diagnosis of Endometrial Cancer

# Research Assistant, Dr. Mohsin Javed, University of management and technology

August 2022 - December 2023

- Electrochemistry research
- Sole Author Review Paper on Utilizing Photoanodic Ta3N5 for the Oxygen Evolution Reaction in Water Splitting Processes through Various Surface Modifications, Approved by Higher education commission and submitted for publication to Journal of chemical education

## Intern, Trade Tracker Software House

May 2023 - August 2023

Became adept in PyTorch and NumPy; Learned p5.js for creative coding; Assisted developers in creating a Retailer Engagement System and a Coaching app

### **ACTIVITIES**

- 2nd Position, PCHTo; Member Pakistan National Team, International Chemistry Tournament 2023.
- Pakistan u-16 national cricket team, top 50 camp out of 10000 candidates
- Honorable Mention International Tournament of Young Mathematicians 2023, Team Captain Pakistan Mathematics team; Top 5 in nationals
- Head of Department engineering and Operations, Winner Asian regional space settlement design competition 2022-23 (ARSSDC)
- Head boy of LGS Muslim town (2021-22), liaison between 1200+ students and admin
- School President of International school Lahore (2023-24), Leader of 3500+ students, supervised 20 societies, and founded 3 school and National level
  competitions, won 6+ national and international Olympiads
- Top 10, Debates and Writing; World scholars cup Global Round (out of 4500 delegates)
- Runners-Up Pakistan Young Physicists Tournament 2023
- Director's Awards for Service to School & Research and Publication (1 out of 350 students)
- Founder and CEO 'Nakhal Pakistan"- NGO promoting financial independence and literacy among the people of Pakistan
- Head Volunteer Disaster Management Project, Agha Khan Development Network; Disaster Management. Project: raising awareness/promoting climate awareness in flood-prone regions of Pakistan
- Founder/Leader, Baghbani Project: Empowers low-income farmers w/ sustainable farming methods via chemistry expertise
- President and founder Himmat Project- Conducted 30+ self defence & legal awareness workshops in low-income schools & comm centres; Drafted reform
  policy & presented to commissioner
- Intern Kashtkari project, Drafted curriculum & conducted workshops of farmers encouraging organic farming in Kasur; Started a community garden for extinct crops in Multan.

### **INTERESTS**

- Languages: English, Urdu, Punjabi, Hindi, Turkish and Arabic
- Sports: Cricket, Basketball, baseball, badminton and table tennis
- Interests: Chemistry, Social Entrepreneurship, Environmental Sustainability, Public administration, Community service and Mathematics.