# MUHAMMAD ASAD MAJEED → +447766841039 → asadmajeed2005@gmail.com → LinkedIn → Github

## Education

## University College London

Sep 2024 - June 2027

Bachelor of Science in Computer Science

London, United Kingdom

Global Undergraduate Scholarship Awardee; Predicted First Class Honors

Cedar College

Aug 2022 - July 2024

Cambridge International AS and A Level

Karachi, Pakistan

A-Level Grades: 4 A\*s in Physics, Mathematics, Computer Science, and Chemistry

100% Merit Scholarship Awardee; Student Council Treasurer; Head of the Cedar Eats and Scinnova organizing team.

#### Experience

#### Coding and Robotics Instructor

April 2025 - Present

BlueShift Education

London, United Kingdom

- Delivered engaging coding lessons for KS3-level students, focusing on programming concepts and problem-solving skills.
- Led hands-on activities and projects to inspire interest in computer science, fostering critical thinking in students.

#### CS Outreach Ambassador

February 2025 - Present

University College London

London, United Kingdom

- Represented UCL Computer Science at outreach events, engaging with prospective students and promoting the program.
- Delivered presentations and workshops to inspire interest in computer science among school students.
- Delivered robotics and coding lessons to aspiring tech students, fostering hands-on learning and interest in STEM fields.

#### VPEE Student Ambassador

November 2024 - Present

University College London

London, United Kingdom

- Conducted engaging campus tours for groups of up to 50 participants, delivering in-depth insights into academic offerings and student life at UCL.
- Assisted prospective students by communicating key information about applications, courses, and support services.

Data Intern

July 2024

Denning School for Artificial Intelligence and Computer Sciences

Karachi, Pakistan

- Completed a comprehensive five-day workshop on mastering data analysis using Power BI.
- Developed an interactive Power BI dashboard to analyze and filter a large dataset of over 7 million sales records from 5 US companies, providing insights on sales performance, company trends, and product popularity.

### **Projects**

#### CyberQuest | Python, Flask, HTML, CSS

April 2025

- Developed Cyber Quest, a Flask-based web app featuring 50+ cybersecurity question sets with timed challenges.
- Implemented user authentication, progress tracking, and dynamic question rendering using Flask, Jinja2, and SQLite.
- Designed a responsive front-end with a dynamic dashboard for real-time progress tracking.

## Project BioReactor | Arduino, C++

December 2024

- Developed a prototype for a monitoring and control system for a TB vaccine plant in Uganda.
- Created a user friendly Dashboard for User Control, connected to an ESP-32 through Wi-Fi to render user Data.
- Used Arduino Uno to control the actuators based on target values set by the user.

## AI Tetris Bot | Python

November 2024

- Developed a Tetris AI using heuristic algorithms to optimize piece placement and maximize game scores.
- Implemented strategies leveraging metrics like aggregate height, line clears, and holes to evaluate board states.
- Incorporated a genetic algorithm to optimize piece placement strategies, improving long-term game performance.

#### AI Maze Solver | C, Java drawapp

October 2024

- Designed and implemented a robot simulation program in C that solves mazes in randomly generated arenas
- Utilized AI path-finding algorithms and data structures for optimal path and obstacle avoidance within the arena.
- Created a graphical interface to visualize the robot's real-time position, path, and actions in a smooth, animated manner.

#### Technical Skills

Languages: Python, C, C++, HTML/CSS, Javascript, SQL, Haskell, Java

Developer Tools: VS Code, Pycharm, IntelliJ Idea

Technologies/Frameworks/Libraries: Linux, Arduino, Git, GitHub, Flask, Power BI, Tkinter, NumPy, ncurses,

Matplotlib, Java drawapp, Three.js

Certifications: CS50x