# Syed, Mohammad Ali Qasim

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#### I am a UK national and eligible to work in the UK.

#### PROFILE

**First-class Robotics** graduate from the **University of Essex**, consistently placed on the **Dean's List for Academic Excellence**. Skilled programmer and excellent analytical problem-solver with a good command of C#, C, C++, JavaScript, HTML/CSS, Java, and Python.

# Mathematically minded, analytical, and creative problem-solver, team player, quick and eager learner, punctual, responsible, and task-focused.

Passionate about socially impactful work. Strives to create innovative solutions to complex problems and help bring smiles to people's faces. Enjoys cycling, volleyball, and strength training.

# WORK EXPERIENCE

#### Automation Consultant, SaathEase Life Sciences Bhopal (2022 – 2023) Initiative, People-Skills, Process Automation, Google Workspaces.

Interface with stakeholders at all levels of the business (patients, medical staff and management) to identify requirements and help implement productivity-boosting solutions. Used Google Apps Script and REST APIs to streamline and automate financial recordkeeping. Automated tedious processes which used to take up many hours of employee time.

# Team Member, Heavenly Desserts (Restaurant Industry) (2021 - 2022)

Gained experience catering to customers as part of a team. This required discipline, attention to detail, teamwork, and the ability to keep up in a fast-paced environment.

# EDUCATION

#### University of Essex

#### BEng Robotics - 1st Class Hons (Dean's list 2019-2022)

Relevant Coursework: AI, OOP, Application Programming, Game Programming, Data Structures & Algorithms, Algorithmic Game Theory, Engineering Maths.

#### SKILLS

- Programming Languages: Java, C#, C++, C, JavaScript, HTML/CSS, Python, MATLAB.
- Robotics & Al: OpenCV in Python and Java, ML Algorithms (Decision Tree, SVM, Regression)
- Principles and Management Technologies: Agile methodology & Scrum (Jira), Git/GitHub, OOP.
- Languages: (Native) English, Urdu, Hindi. (Beginner) Arabic, Japanese.

#### Projects

**Capstone Project: Create User-following Drone (2021 – 2022)** OpenCV, Python, Atlassian Jira, Gitlab, Agile Methodology, Version Control Programmed a drone to autonomously follow users. <u>See more!</u>

#### Sanitation Management System (2020 - 2021)

Java, Jira, Gitlab, Agile Methodology, Version Control, Team Project, Leadership Created companion app for hygiene tracking sanitiser dispenser system. <u>See more!</u>

### Experimental Setup for Psychology Research (2022)

HTML/CSS, JavaScript, GitHub, Version Control, Cloud Database

Created interactive web-based experimental setup for cognitive psychology research See more!

#### Computer Game Programming (2019 - Present)

Java, C++, GitHub, Version Control, Multi-Threading Designed and programmed graphical and text-based games in various languages. <u>See more!</u>

#### Computer Vision (2021)

OpenCV, C++, Python, Linux, Computer Vision, Artificial Intelligence. Computer vision projects using OpenCV. <u>See more!</u>

#### **General Coding Projects**

Data Structures and Algorithms, AI, Computer Vision,

Many projects I made to learn about and experiment with concepts and technologies. See more!

# Robot Navigation and Mechatronic Design (2020 - 2022)

#### ROS/ROS2, Gazebo, C++, Linux, MATLAB

ROS/ROS2 in C++, sensor-and-odometry-guided navigation, obstacle-avoidance, SLAM, Gazebo simulation, MATLAB Robotics toolbox, DH parameters, kinematics, transformations. <u>See more!</u>

#### Robots in Healthcare: A Scoping Review (2021 - 2022)

Co-authored a paper with NHS doctors to review the application of robotics in clinical settings for Springer-Nature's Current Robotics Reports (2022). <u>Have a look!</u>

#### EXTRACURRICULARS & VOLUNTEERING

#### Local Mosques, Social Counselling (2015 - Current)

I volunteer in community-building and counselling efforts at mosques and Islamic cultural centres to help foster a sense of belonging and community, especially among troubled and disconnected youths. This has helped me develop my communication and oratory skills and the opportunity to work towards change for good.

#### Eastern Public School, Student Council President (2016 - 2017)

Acted as student and school representative. Lead a team of student leaders to spearhead student welfare initiatives and organise school events, such as the provision of food packages to 600+ impoverished households in the month of Ramadan. This involved surveying the target area to help focus on those most in need, then organising and arranging delivery/distribution of provisions.