



# M. UMAR SHAHBAZ

Aspiring Programmer

## PROFILE

I am learning to create programs which are efficient and follow the standard programming ethics such as minimizing technical debt and providing proper documentation. I am frequent user of GitHub and am currently in charge of creating a website with my team.

## CONTACT

GitHub:  
[www.github.com/KingHowler](https://www.github.com/KingHowler)

EMAIL:  
[m.umarshahbaz.2007@gmail.com](mailto:m.umarshahbaz.2007@gmail.com)

## EDUCATION

### O Levels CAIE

#### With Computer Science

2020 - 2023

5A\*s and 3As

Awarded "Certificate of Achievement" due to outstanding results.  
Crescent Model Higher Secondary School

### A Levels CAIE

#### With Computer Science, Physics, Chemistry & Mathematics

2023 - 2025

Lahore Grammar School Johar Town Boys Campus

2A\*s, 1A, 1B

## EVENTS

### Participant of ROBOTMEA, by STEAM Education

Feb 2023

Participant of the ROBOTMEA's Project Exhibition. Made a small model of a smart vehicle which attempts to avoid accidents as much as possible. The vehicle stays inside the lane, speeds up if the vehicle behind is approaching to close. Brakes automatically if the road is blocked. Model also contained proper signal lights.

### ACSEC 8

Oct 2023

Participant of ACSEC 8's Robotics Category. Finished among the top participants and won a certificate of distinction.

### Attended Artificial Intelligence and Computer Science workshop hosted by Crescent Model Higher Secondary

July 2024

Attended the workshop and gained exposure to the world of AI, it's types and how the neural network takes inspirations from the human brain. Visited CETC (Crescent Emerging Technologies Centre) and discovered the multiple sub-divisions in the field of Computer Science

### CO-HEAD of Robotics sub-category "Maze Madness" at LGS JT Innoventions

October 2024

Held the CO-HEAD position in the Maze Madness category. Tasked with creating the maze blueprint and code for the model of a demo bot to solve the maze.

## SKILLS

### Ethical Programming

Experience in a wide variety of languages

Experience in collaborative works

Experience in open-source projects and GitHub

Proficient English speaker

Active Sports player

Structured Problem Solving and Analysis

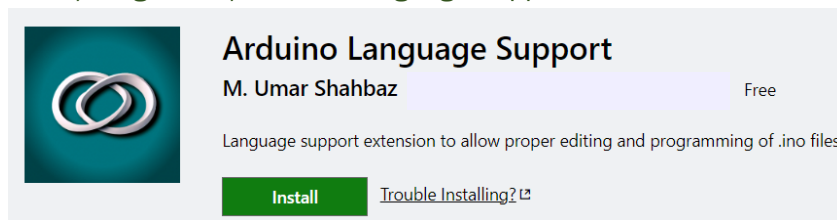
Creative Works

# MOST PROMINENT PROJECTS

## Arduino Language Support

Extension for VS Code

Available on [www.github.com/KingHowler/Arduino-Language-Support](https://www.github.com/KingHowler/Arduino-Language-Support)



Enables Syntax Highlighting for all themes and offers 2 new themes alongside

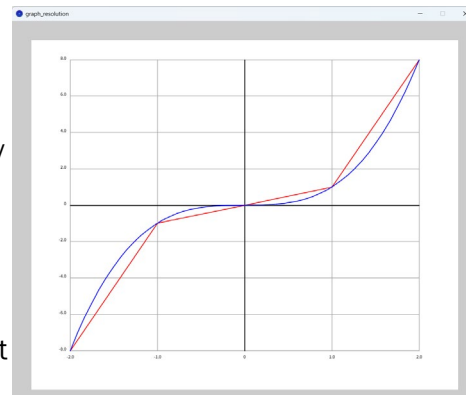
## Graph-Plotter

Library for Processing IDE

Available on [www.github.com/KingHowler/Graph-Plotter](https://www.github.com/KingHowler/Graph-Plotter)

Enables making graphs easily in Processing IDE, has many easy-to-use functions and customization options. It was built to allow making graphs from multiple input types including the following:

1. Raw Data (For Physics or other experimentations)
2. Mathematical equations
3. Programmed Data (To draw graphs which you can't using normal math i.e. Square Waves)
4. Serial Input (To draw live graphs from a USB Port, useful for debugging and testing. Also works as a makeshift Oscilloscope)



## Nano Ninja's LFR

25% decrease in time duration to complete a track compared to regular code found on most of the internet.

Available on [www.github.com/KingHowler/Line-Follower](https://www.github.com/KingHowler/Line-Follower)

## UNO Card Game Logic

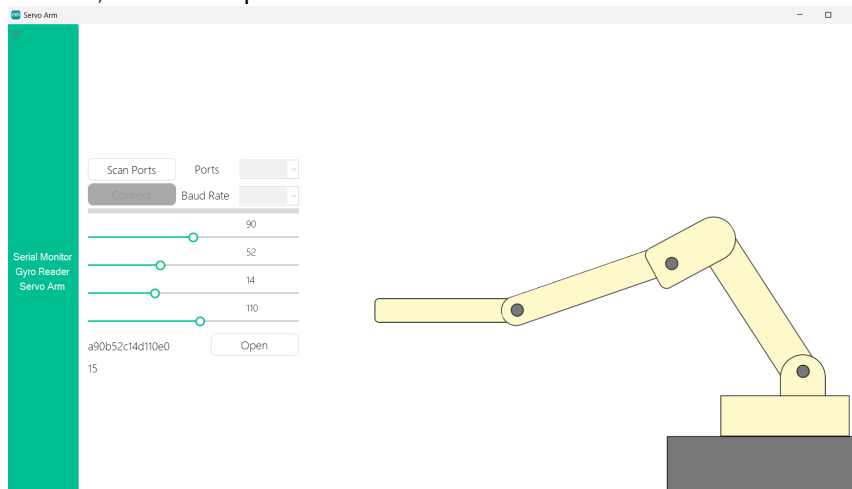
The main unit to control an UNO game. Made in a way to enable integration with a GUI easily.

Available on [www.github.com/KingHowler/UNO\\_Card\\_Game](https://www.github.com/KingHowler/UNO_Card_Game)

## Arduino Toolbox

A WinForms application that can:

1. Check for Available Ports
2. Read Serial Data
3. Draw a graphical Representation of Tilt and Roll using ADXL345 (or equivalent)
4. Control a robotic arm, with live representation of the current state of the arm



Installer available on [www.github.com/KingHowler/Arduino-Interfaces-using-Winforms](https://www.github.com/KingHowler/Arduino-Interfaces-using-Winforms)