

5.1 Conclusion:-

In this project the developing of a color sorting robot has been achieved. The color of objects is detected using the color sensor TCS3414CS which gives digital values that represent those colors. The sensor is connected to Arduino Uno to control a number of motors to achieve the right movement of the robot in response to the detected color.

5.2 Recommendations:-

The color sorting robot is used for sorting objects with the help of the color sensor. For better performance the system can be improved by:

1. Use a color sensor with a better noise immunity.
2. Use a camera instead of color sensor.
3. For more accurate color detection use HSI, HSV or HSL instead of RGB color model.
4. Improve the controllability using closed loop system.
5. Use Ultrasonic sensor of more accurate positioning.

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