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INDUSTRIAL LINE FOLLOWER FOR SUPPLYING MATERIALS

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ABSTRACT

This project presents the development of line following robot for supplying materials in manufacturing industry. The problem statement of this project are in big factory, usually the materials are heavy and risky when people want to handle it and the company need a lot of workers to carry the materials in the factory and it can give the highly cost in order to pay their salary. So, the purpose of our project is to design a robot that can carry heavy and risky products from one places to another and to design a robot that can save the cost, time and energy. This robot uses five circuit segments which are IR sensor, motor driver (MDD10A), WiFi Serial Transceiver Module (ESP8266), single channel 5V relay breakout board and microcontroller (Arduino UNO). This robot uses IR sensors to sense the line to move from one places to another places. To activated the robot, the switch must be turn ON using an application on the smart phone that linked with WiFi Serial Transceiver Module (ESP8266). IR sensor will detect the intensity of light depends on the colour of the line either black or white. The output from IR sensor will be send to the microcontroller to energize the motor driver which makes the DC motor starts to rotate the mecanum wheels and moving along the lines.

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