IOT Based Automated Robotic Arm Using NodeMcu

N180863 – Medida Harshita

IOT PROJECT REPORT

BATCH -15

ABSTRACT

As we are living in 21st century, where industries are using "Industry 4.0" revolution, automation is one of the important part of industry. The pick and place robotic arm is one of the technology in manufacturing industries or any other industry which is designed to perform pick and place operations as per requirement.

In our project, we have mainly focus to make a robotic arm whose primary function is to do pick and place operation. We have designed a system which eliminates the human error and human intervention to get more precise and efficient work. The project deals with implementing of a pick and place robotic arm using Arduino and NodeMCU microcontroller.

The main focus of our project was to design and develop the mechanism for robotic arm for lifting. We have designed a robotic arm which is having four degree of freedom and we programmed to complete accurately simple light material lifting task which may be assist in the production line or assembly line in any industry. Our robotic arm is equipped with 6 servo motors to link the parts and bring arm movement. It is controlled by a NodeMCU microcontroller which accepts input signals from a mobile application named Blynk.