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**Robot Controlling Using Arduino Uno**

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**Abstract**

In recent years, robotics engineering field is an emerging field that is in great demand as it includes design and construction with various applications like vehicle assembly, packing food items, electronic industries, appliance building etc. This paper describes controlling of a robot using gestures. Making a gesture involves manoeuvre of the face, hand or any other body parts. Making a gesture changes from non-verbal physical communication that do not convey with particular messages, like proxemics, indicative displays, or joint attention displays. It allows human beings to pass on a diversity of affection and thinking, from conflicts and combat to agreement and endearment, along with kinesics towards their speech. The end user needs to put on a making device of gesture that involves a sensor. The sensing element will record the hand variation in a particular path that results in robot movement in the appropriate direction. Making the gesture device along with robot are interconnected wirelessly through radio waves. The wireless transmission qualifies the end user to enact the robot in favorable way. A transferring instrument is used in the hand that consists of accelerometer and RF transmitter using Arduino Uno. It will pass on commands to robot such that it can perform the essential tasks like turning left, right, forward, reverse and stop. All these jobs will be executed by using hand gestures.

**Keywords:**

Arduino, Decoder, Encoder, IC, RF, Robot

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