Abstract

Generally, robots are programmed to perform specific tasks which humans cannot. To increase the use of robots where conditions are not certain such as firefighting or rescue operations, robots can be made which follow the instruction of human operator and perform the task. In this way decisions are taken according to the working conditions by the operator and the task is performed by the robots. Thus, we can use these robots to perform those tasks that may be harmful for humans. The project consists of mainly two parts, one is transmitter part and another is receiver part. The transmitter will transmit the signal according to the position of accelerometer and your hand gesture and the receiver will receive the signal and make the robot move in respective direction. Bluetooth communication is used to wirelessly control the robot.

Block Diagram



In the transmitter part an accelerometer ADXL335 gives an analog output so here we need to convert this analog data into digital. For this purpose we have used an Arduino UNO. These values are read by the microcontroller and transferred wirelessly via Bluetooth technology. Movement of the hand in a specific direction will transmit a command to the robot which will then move in a specific direction.