

Human Following Robot

Kartik Bangar, Aman Dalal, Muniswamy, Siddant Sureshkumar, Yasir Inamdar

JSPM's Rajarshi Shahu College of Engineering, Polytechnic, Tathawade, Pune, India

Abstract: *For a robot that operates independently, the interaction between the human and the robot is the most critical aspect. A robot that operates completely on its own should not only accomplish the tasks assigned to it but also somehow develop a connection with the individual controlling it. Extensive research has been conducted on these types of robots. To enable a robot to communicate and engage with the individual, it must also be able to follow that specific person. The main objective of our research is to design and construct a robot that not only follows the target but also advances toward it while executing the tracking. The item must be distinct for the robot to identify it and achieve the goal. Ensuring the robot avoids collisions with the object is another challenge that must be addressed, so an ultrasonic sensor is employed for this purpose. All motor control is managed by the controller.*

Keywords: Human-following, human-tracking, Wifi camera, human robot interaction