

# Automated Robotic Arm

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**Abstract:** *The term 'robot' generally refers to a machine that looks and works in a way similar to a human. The modern industry is rapidly shifting from manual control of systems to automation, in order to increase productivity and to deliver quality products. Computer-based systems, though feasible for improving quality and productivity, are inflexible to work with, and the cost of such systems is significantly high. This led to the swift adoption of automated systems to perform industrial tasks. One such task of industrial significance is of picking and placing objects from one place to another. The implementation of automation in pick and place tasks helps to improve efficiency of system and also the performance. In this paper, we propose to demonstrate the designing and working of an automated robotic arm with the Machine Learning approach. The work uses Machine Learning approach for object identification / detection and traversal, which is adopted with Tensorflow package for better and accurate results.*

**Keywords:** Robotic Arm, Machine Learning, Object Detection, TensorFlow, Raspicam, Virtual network computing