

Design and manufacture of a robotic arm for product picking

Hoang Van Thai

Abstract: In industrial practice, using robotic arms to pick and sort products is an effective solution that increases productivity and reduces labor costs. This project focuses on designing and manufacturing an automatic robotic arm system to perform the product picking process. The objective of the research is to build a system capable of selecting and picking different types of products with high accuracy. The research method includes implementing a control algorithm based on machine learning along with direct experimentation on a robotic platform. Through this, the project is expected to provide a useful solution for manufacturers to improve production processes and enhance work quality.

Keywords: robot arm, product picking, machine learning, industrial automation