

Robotics Project - A robotic arm for train inspection

Roberto Ciardi, Giovanni Falzone

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1 Introduction

The project represents a ROS prototype for a robotic arm, useful for works of inspection of mechanical environments, in this case with particular attention to train inspection. The checking of trains' "brake pads" is not of easy accomplishment and could be dangerous for a man to move under a train for these kind of inspection: the purpose of the project is to create a robotic arm capable of moving below a train and automatically, or with remote controlled, find and check brake pads status. Brake pads are naturally a critical aspect for trains and in general for vehicles, and this robotic arm has the duty to check the width of pads, to understand if they must be replaced.