

Design of control circuit for robot moving with OMNI omnidirectional wheels

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Abstract: This study focuses on the design of a control circuit for a flexible mobile robot using omnidirectional wheels (OMNI). The context of the topic arises from the necessity of free movement solutions in confined spaces, such as factories or warehouses. The objective is to build and deploy an efficient control system for the OMNI robot, meeting operational needs in specific environments. The research methodology includes theoretical simulation combined with practical experimentation to optimize the robot's movement functions. The expected results of this topic will contribute to improving the robot's independent working capability and efficiency, while expanding its applications in various industrial fields.

Keywords: Robot control, OMNI omnidirectional wheel, control system