

Design and fabrication of an omnidirectional mobile robot model using 3 omni wheels

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Abstract: In the context of the widespread application of automation technology in practice, this topic focuses on the design and fabrication of a model for an omnidirectional mobile robot system using 3 omni wheels. The goal is to build a system capable of flexible movement across various surfaces and terrain conditions. Through theoretical and experimental research, this topic hopes to contribute new technical solutions in the field of robotics and mobile automation. The expected result is a robot model that can be effectively applied in construction projects, warehousing, restaurant services, and many other environments.

Keywords: Omnidirectional robot, Omni wheel, Automation engineering, Experimental research, Capstone project