

Design of a control system for a mobile robot warning of dangerous areas through the state of the operator's hand

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Abstract: This study focuses on designing and implementing an advanced control system for mobile robots aimed at warning about dangerous areas based on operator actions. The practical context highlights a high demand for enhancing safety at construction sites, warehouses, and other workplaces. The main objective is to build a system capable of analyzing the user's hand state to make intelligent control decisions. The research method combines theory with experimentation to ensure the system's effectiveness and reliability. Expected results include a significant improvement in occupational safety while contributing to the development of automation technology in the field of mobile robotics.

Keywords: Mobile robot, Automation technology, User state analysis