Patent Search

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Abstract:

Research in indoor autonomous mobile robots (AMRs) is pivotal, emphasizing the acquisition of environment and self-data through sensors. These sensors facilitate t
localization, mapping, obstacle recognition, and motion control. This review delves into sensing technologies for indoor AMRs, analyzing benefits and potential drawb
single-sensor applications while introducing fundamental principles and common algorithms for data processing. Additionally, it explores multi-sensor fusion techniq
the work outlines future trends and challenges in indoor AMR sensing technology, focusing on practical applications.

Complete Specification

Description:FIELD OF INVENTION

The invention pertains to an autonomous mobile robot system designed to monitor emotional and physical health parameters. It includes sensors and algorithms f
time data collection and analysis. The method involves integrating sensor data to assess an individual's well-being and provide relevant feedback or assistance.

BACKGROUND OF INVENTION

In recent years, there has been a significant advancement in autonomous mobile robots (AMRs), leading to their increasing adoption in various indoor scenarios. AM
replacing humans in tasks across industries such as warehousing, logistics, healthcare, restaurants, and personal services. The core aspects of mobile robotics enco
locomotion, perception, cognition, and navigation. Locomotion focuses on the motion system design, considering factors like environment, controllability, and effici
Perception involves gathering information about the robot's surroundings and itself. Cognition entails analyzing and processing perception data to devise control st
for task completion. Navigation integrates perception, cognition, and motion control to navigate the robot from its starting point to a designated goal in a known or
unknown environment. Perception plays a pivotal role in ensuring the safe and efficient operation of mobile robots by enabling accurate environment sensing and
making. The perception system employs various sensing techniques to gather information for tasks like localization, mapping, and object detection, facilitating effec
path planning and navigation.

The patent application number 202011020513 discloses a system & method for real time health monitoring of a machine component

View Application Status

Department of Industrial Policy and Promotion
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