Abstract

Different types of sensors are often fused to acquire information which cannot be acquired by a single sensor. Sensor fusion is particularly applicable for mobile robots for object detection and navigation. The techniques that have been developed so far for detecting an obstacle are costly. Hence, a new technique is proposed which can detect an obstacle, judge its distance and measure the size of the obstacle using one camera and one ultrasonic sensor. The technique is cheap in terms of sensor cost and in terms of computational cost.
Obstacle Detection and Object Size Measurement for Autonomous Mobile Robot using Sensor

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Index Terms
Keywords
Sensor fusion  autonomous mobile robot  obstacle detection  navigation