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## **Obstacle Detection using Lidar 360° for Military Use**

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**Abstract:** This paper presents a novel approach to obstacle detection using LiDAR360° for military use. The proposed system utilizes a 360° LiDAR sensor to detect obstacles in the environment and employs a real-time algorithm to identify and track potential threats. The system is designed to operate in challenging environments, including low-light and low-visibility conditions, and is capable of detecting a wide range of obstacles, including vehicles, buildings, and natural terrain features. The system's performance is evaluated using both simulated and real-world data, and the results demonstrate its effectiveness in detecting obstacles in a variety of scenarios. The proposed system has the potential to significantly improve situational awareness and enhance the safety and effectiveness of military operations in complex environments.

Keywords: LiDAR sensor.

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