

# An All-Terrain Intelligent Autonomous Vehicle with Sensor Fusion Based Navigation Capabilities

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**Abstract:** *An automated defense robot building is planned, that has a laser gun attached, which is utilized for pointing laser rays to destroy the target object. One of the most important things about these robots is that they have the capability to perform missions remotely in the field, without any actual danger to human lives. In the proposed system, a robot is developed that is controlled through Microcontroller. For the aiming purpose and to view the road and the surroundings in which the robot is travelling, wireless cameras are installed. Radio frequency can be used to control the robot.*

*These defense robots used in military are usually employed with the integrated system including gripper, cameras and sensors. This is specially designed for defense robotic system to save human life and protect the country from enemies. In the existing systems, personal computer using ZigBee protocol is used to monitor the robot.*

**Keywords:** automated defense robot

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