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## **Automatic Fire Extinguisher**

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Abstract: The Integration of Artificial Intelligence (AI) with advance technologies has significantly Enhanced safety measures in various domains, including Transportation. In this project, we purpose an innovative AI - Based automatic fire extinguisher system system designed specifically for vehicles. The project "Automatic fire extinguisher rover" presents an ingenious and dynamic approach to revolutionize fire safety systems. endanger lives and property. This project introduces an autonomous rover-based fire extinguishing system capable of detecting and suppressing fires in various environments. The rover is equipped with fire and heat sensors, computer vision capabilities, and a robust fire suppression mechanism. Strategically deployed sensors enable the rover to detect sudden temperature spikes or the presence of smoke. Upon identifying potential fire incidents, the CAMERA will assess the situation, taking into account factors like fire size and environmental conditions. Once a fire is confirmed, the rover will go toward the area where the fire is detected and start the extinguishing process. The rover will maintain a reasonable distance from the fire with the help of an Ultrasonic sensor. The project's standout features include rapid response time, adaptability to diverse settings, and minimal or zero human intervention.

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