# A Comprehensive Review on Accident Detection Using Artificial Intelligence and Machine Learning

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**Abstract***: This paper reviews the role of Artificial Intelligence (AI) and Machine Learning (ML) in accident detection systems, focusing on the application of image processing techniques and Convolutional Neural Networks (CNNs) to enable detection. Through a comprehensive analysis of recent methodologies, challenges, limitations, and future research directions, this paper aims to provide a detailed understanding of how AI and ML are advancing the field of accident detection.*

**Keywords:** Accident Detection, Artificial Intelligence, Machine Learning, Image Processing, Convolutional Neural Networks