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Highly Curved Path Prediction and Vehicle Detection in Lane Roads

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Abstract: *Lane detection and curve identification pose significant challenges in the advancement of autonomous vehicles. This paper explores diverse algorithms and their integration to accurately detect lanes and identify curvature within them. Our objective is to develop a real-time program capable of identifying lanes and curves in video footage. By leveraging Computer Vision algorithms and OpenCV libraries, we successfully detect lanes and determine lane curvature within dynamic video sequences. However, it is important to note that the program may not produce accurate results in scenarios where lane markings are absent or distorted.*

Keywords: CNNs, Unstructured Lane, Lane Detection, Haar Cascade, Deep Learning

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