ABSTRACT

The rapid development of technology in the field of image processing and computer vision today has a significant impact on various aspects of life, one of which is the application of vehicle type classification systems based on shape. This Final Project implements the Haar-Like Features method with additional Fuzzy Logic to calculate the confidence level of the detected vehicle based on the brightness level of each frame. The main objective of this project is to create a system that can detect and classify the type of vehicle from the front view and rear view. System testing was conducted on 2 different cases, resulting in an average accuracy of 62.8% in front view detection and 88.5% at night. The results of this Final Project are expected to be the basis for further development in the field of vehicle detection and classification on the highway, as well as contributing to increasing the level of detection confidence through the integration of Fuzzy Logic.

Keywords: Haar-Like Features, Vehicle Detection, Classification, , Fuzzy Logic

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