Deteksi Kelelahan pada Pengendara Mobil Menggunakan Metode *Boost Local Binary Patterns* (B-LBP)

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Abstract

Traffic accidents have become an alarming issue in Indonesian society. Driver fatigue is one of the main factors that cause traffic accidents. The fatigue can be caused by several conditions such as driving at night, lack of sleep, alcohol use, driving on monotonous roads, and taking drugs. Thus, this thesis discusses how to detect driver fatigue based on facial images. The detection is done with two classes, those are driver with normal circumstances and driver with fatigue. The methods used in this thesis are Boost Local Binary Patterns (B-LBP) for feature extraction and Support Vector Machine (SVM) for classification. The results of the system performance reached 93% accuracy with a 94% recall value and 94% precision. The parameters used in LBP are $P = 4$, $R = 2$

Keyword : Fatigue Detection, Boost Local Binary Patterns (B-LBP), Support Vector Machine (SVM)