

Helmet and Autonomous Driving Detection using Machine Learning

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Abstract: *In developing countries, motorcycles have long been the predominant form of transportation. Motorcycle accidents have increased in recent years. A motorcyclist's failure to wear a protective helmet is one of the leading causes of fatalities in accidents.. The most common way to ensure that motorcyclists wear a helmet is by traffic police to manually monitor motorcyclists at road junctions or through CCTV footage and to penalise those without a helmet. But it requires hu-man intervention and effort. So this system Proposes an automated system for detecting motorcyclists who do not wear a helmet and retrieving their autonomous driving from CCTV video footage First, the system classifies moving objects as motorcycling or non-motorcycling. In the case of a classified motorcyclist, the head portion is located and classified as a helmet or non-helmet. Finally, for the motorcyclist identified without a helmet, then autonomous driving is detected and the characters on it are extracted by using the OCR algorithm.*

Keywords: Image Selection, Extraction, Machine learning

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