

Detecting of train coupler connection using VGG16 architecture

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ABSTRACT

The coupler on trains, responsible for linking train carriages, plays a vital role in ensuring the seamless and coordinated operation of the carriages. This is essential for guaranteeing the safety and smoothness of train journeys. This research aims to classify connection in train coupler in order to reduce the time of coupler inspection and reduce the risk of accidents for officers when manual coupler inspections are done. The data used consists of 2841 images consisting of images of connected coupler and disconnected coupler. After testing the data validation process, it can be concluded that the VGG16 deep learning method works well in identifying connection of train coupler.

Kata Kunci: Coupler, deep learning, VGG16