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MOTION COMPONENT SUPPORTED BOOSTED CLASSIFIER FOR CAR DETECTION IN AERIAL IMAGERY

S. Tuermer¹, J. Leitloff¹, P. Reinartz¹, and U. Stilla²

¹Remote Sensing Technology Institute, German Aerospace Center (DLR) Oberpfaffenhofen, Germany

²Photogrammetry and Remote Sensing, Technische Universitaet Muenchen (TUM) Arcisstrasse 21, 80333 Munich, Germany

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Abstract. Research of automatic vehicle detection in aerial images has been done with a lot of innovation and constant rising success for years. However information was mostly taken from a single image only. Our aim is using the additional information which is offered by the temporal component, precisely the difference of the previous and the consecutive image. On closer viewing the moving objects are mainly vehicles and therefore we provide a method which is able to reduce the search space of the detector to changed areas. The actual detector is generated of HoG features which are composed and linearly weighted by AdaBoost. Finally the method is tested on a motorway section including an exit congested traffic near Munich, Germany.

[Conference Paper](#) (PDF, 3391 KB)

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