
Index formation for similar images search of vehicles

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Existing algorithms of the robust image hashes formation are analyzed. An algorithm to build an index to search for similar images based on the feature points using by modified SIFT algorithm proposed. An algorithm based on the symmetry axis for bounding box extraction of the vehicle is described. The results of the experiments in visual search for similar images based on the actual photos of the vehicles is show. The experimental results show the possibility of practical application of the proposed algorithm in the vehicle identification systems based on recognition of the license plates. The proposed algorithm is applicable to search for similar vehicles.

Keywords: *perceptual image hashing, feature point, SIFT descriptor, symmetry, vehicle, image search.*

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