

Title (en)
AUTOMATIC LEARNING METHOD FOR THE AUTOMATIC LEARNING OF FORMS OF APPEARANCE OF OBJECTS IN IMAGES

Title (de)
MASCHINELLES LERNVERFAHREN ZUM MASCHINELLEN ERLERNEN VON ERSCHINUNGSFORMEN VON OBJEKTEN IN BILDERN

Title (fr)
PROCÉDÉ D'APPRENTISSAGE PAR MACHINE PERMETTANT À UNE MACHINE D'APPRENDRE DES FORMES D'OBJETS SUR DES IMAGES

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Application
EP 12769887 A 20120813

Priority
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Abstract (en)
[origin: WO2013037357A1] An automatic learning method for the automatic learning of the forms of appearance of objects in images in the form of object features (28) from training images (20) for using the learned object features (28) in an image processing system comprises determining a feature contribution (30) by a training image (20) to object features (28) by weighted summation of training image features by means of linear filter operations, applied to the feature image (24), by using a weight image (32) obtained at least from an annotation image (22) and a classification image (26). This allows faster learning processes and also the learning of a greater variance of forms of appearance of objects and backgrounds, which increases the robustness of the system in its application to untrained images.

IPC 8 full level
G06K 9/62 (2006.01)

CPC (source: EP US)
G06F 18/214 (2023.01 - EP US)

Citation (search report)
See references of WO 2013037357A1

Citation (examination)
• DAVIS J W ET AL: "A Two-Stage Template Approach to Person Detection in Thermal Imagery", 2005 SEVENTH IEEE WORKSHOPS ON APPLICATIONS OF COMPUTER VISION (WACV/MOTION'05) - 5-7 JAN. 2005 - BRECKENRIDGE, CO, USA, IEEE, LOS ALAMITOS, CALIF., USA, 5 January 2005 (2005-01-05), pages 364 - 369, XP032120847, ISBN: 978-0-7695-2271-5, DOI: 10.1109/ACVMOT.2005.14
• ZDENEK KALAL ET AL: "P-N learning: Bootstrapping binary classifiers by structural constraints", 2010 IEEE CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION (CVPR), 13-18 JUNE 2010, SAN FRANCISCO, CA, USA, IEEE, PISCATAWAY, NJ, USA, 13 June 2010 (2010-06-13), pages 49 - 56, XP031726056, ISBN: 978-1-4244-6984-0

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