



Probability distribution function based iris recognition boosted by the mean rule

Submitted by Pejman RASTI on Fri, 09/07/2018 - 13:25

Titre	Probability distribution function based iris recognition boosted by the mean rule
Type de publication	Communication
Type	Communication avec actes dans un congrès
Année	2015
Langue	Anglais
Date du colloque	17-18/01/2015
Titre du colloque	2014 International Conference on Intelligent Computing and Internet of Things (ICIT)
Titre des actes ou de la revue	Proceedings of 2015 International Conference on Intelligent Computing and Internet of Things
Pagination	47-50
Auteur	Pjatin, Kert [1], Daneshmand, Morteza [2], Rasti, Pejman [3], Anbarjafari, Gholamreza [4]
Pays	Chine
Editeur	IEEE
Ville	Harbin
ISBN	978-1-4799-7534-1
Mots-clés	classification [5], Iris recognition [6], Kullback-Leibler divergence [7], Mean rule [8], Probability distribution function [9] In this work, a new iris recognition algorithm based on tonal distribution of iris images is introduced. During the process of identification probability distribution functions of colored irises are generated in HSI and YCbCr color spaces. The discrimination between classes is obtained by using Kullback-Leibler divergence. In order to obtain the final decision on recognition, the multi decision on various color channels has been combined by employing mean rule. The decisions of H, S, Y, Cb and Cr color channels have been combined. The proposed technique overcome the conventional principle component analysis technique and achieved a recognition rate of 100% using the UPOL database. The major advantage is the fact that it is computationally less complex than the Daugman's algorithm and it is suitable for using visible light camera as opposed to the one proposed by Daugman where NIR cameras are used for obtaining the irises.
Résumé en anglais	
URL de la notice	http://okina.univ-angers.fr/publications/ua17516 [10]
DOI	10.1109/ICAIOT.2015.7111535 [11]
Lien vers le document en ligne	https://ieeexplore.ieee.org/document/7111535/ [12]

Liens

- [1] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=29041>
- [2] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=29014>
- [3] <http://okina.univ-angers.fr/httpperso-laris.univ-angers.fr/rasti/publications>
- [4] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=29023>
- [5] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=1301>
- [6] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=25204>
- [7] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=25203>
- [8] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=25205>
- [9] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=25202>
- [10] <http://okina.univ-angers.fr/publications/ua17516>
- [11] <http://dx.doi.org/10.1109/ICAIOT.2015.7111535>
- [12] <https://ieeexplore.ieee.org/document/7111535/>

Publié sur *Okina* (<http://okina.univ-angers.fr>)