CONDUÇÃO DA REVISÃO SISTEMÁTICA

Fonte: IEEE Xplore (http://ieeexplore.ieee.org/)

Data de busca: 24/05/2015

Palavras-chave utilizadas: face recognition, face detection, low resolution, surveillance camera, illumination invariance, pose invariant.

String utilizada: *("face recognition" OR "face detection") AND ("low resolution" OR "surveillance camera" OR "illumination invariance" OR "pose invariant")*

Total de artigos encontrados: 27

Organização dos artigos encontrados: Os artigos encontrados foram catalogados com o auxilio do software *Zotero,* e a utilização do padrão bibliográfico "*ACM SIGCHI Proceedings (2016)".*

Lista de artigos encontrados:

[1] O. Arandjelović and R. Cipolla. 2008. Colour invariants for machine face recognition. *8th IEEE International Conference on Automatic Face Gesture Recognition, 2008. FG '08*, 1–8. http://doi.org/10.1109/AFGR.2008.4813306

[2] Hai-Wen Chen and M. McGurr. 2014. Improved color and intensity patch segmentation for human full-body and body-parts detection and tracking. *2014 11th IEEE International Conference on Advanced Video and Signal Based Surveillance (AVSS)*, 361–368. http://doi.org/10.1109/AVSS.2014.6918695

[3] N.J. Chhasatia, C.U. Trivedi, and K.A. Shah. 2013. Performance evaluation of localized person based scene detection and retrieval in video. *2013 IEEE Second International Conference on Image Information Processing (ICIIP)*, 78–83. http://doi.org/10.1109/ICIIP.2013.6707559

[4] P.M. Corcoran, F. Nanu, S. Petrescu, and P. Bigioi. 2012. Real-time eye gaze tracking for gaming design and consumer electronics systems. *IEEE Transactions on Consumer Electronics* 58, 2, 347–355. http://doi.org/10.1109/TCE.2012.6227433

[5] P.R. Devarakota, M. Castillo-Franco, R. Ginhoux, B. Mirbach, S. Kater, and B. Ottersten. 2009. 3-D-Skeleton-Based Head Detection and Tracking Using Range Images. *IEEE Transactions on Vehicular Technology* 58, 8, 4064–4077. http://doi.org/10.1109/TVT.2009.2020595

[6] Chin-Shyurng Fahn and Chin-Sung Lo. 2010. A high-definition human face tracking

system using the fusion of omni-directional and PTZ cameras mounted on a mobile robot. *2010 the 5th IEEE Conference on Industrial Electronics and Applications (ICIEA)*, 6–11. http://doi.org/10.1109/ICIEA.2010.5514985

[7] D. Gorodnichy and E. Granger. 2014. Target-based evaluation of face recognition technology for video surveillance applications. *2014 IEEE Symposium on Computational Intelligence in Biometrics and Identity Management (CIBIM)*, 110–117. http://doi.org/10.1109/CIBIM.2014.7015451

[8] M.A. Haque, K. Nasrollahi, and T.B. Moeslund. 2013. Real-time acquisition of high quality face sequences from an active pan-tilt-zoom camera. *2013 10th IEEE International Conference on Advanced Video and Signal Based Surveillance (AVSS)*, 443–448. http://doi.org/10.1109/AVSS.2013.6636680

[9] J. Harguess, Changbo Hu, and J.K. Aggarwal. 2009. Fusing face recognition from multiple cameras. *2009 Workshop on Applications of Computer Vision (WACV)*, 1–7. http://doi.org/10.1109/WACV.2009.5403055

[10] Jingu Heo, M. Savvides, and B. VijayaKumar. 2005. Performance Evaluation of Face Recognition using Visual and Thermal Imagery with Advanced Correlation Filters. *IEEE Computer Society Conference on Computer Vision and Pattern Recognition - Workshops, 2005. CVPR Workshops*, 9–9. http://doi.org/10.1109/CVPR.2005.508

[11] J. Hirata, M. Morimoto, and K. Fujii. 2008. Estimating face direction from low resolution images. *Automation Congress, 2008. WAC 2008. World*, 1–6.

[12] Xiaolei Huang. 2008. Commentary Paper on "Video Surveillance for Biometrics: Long-Range Multi-biometric System." *IEEE Fifth International Conference on Advanced Video and Signal Based Surveillance, 2008. AVSS '08*, 183–183. http://doi.org/10.1109/AVSS.2008.46

[13] Y. Ishii, H. Hongo, K. Yamamoto, and Y. Niwa. 2004. Real-time face and head detection using four directional features. *Sixth IEEE International Conference on Automatic Face and Gesture Recognition, 2004. Proceedings*, 403–408. http://doi.org/10.1109/AFGR.2004.1301566

[14] Sung-Uk Jung and M.S. Nixon. 2011. Estimation of 3D head region using gait motion for surveillance video. *4th International Conference on Imaging for Crime Detection and Prevention 2011 (ICDP 2011)*, 1–6. http://doi.org/10.1049/ic.2011.0105

[15] A. Leykin and R. Hammoud. 2008. Real-time estimation of human attention field in LWIR and color surveillance videos. *IEEE Computer Society Conference on Computer Vision and Pattern Recognition Workshops, 2008. CVPRW '08*, 1–6. http://doi.org/10.1109/CVPRW.2008.4563059

[16] W. Louis and K.N. Plataniotis. 2010. Frontal face detection for surveillance purposes using dual Local Binary Patterns features. *2010 17th IEEE International Conference on Image Processing (ICIP)*, 3809–3812. http://doi.org/10.1109/ICIP.2010.5653543

[17] W. Louis, K.N. Plataniotis, and Yong Man Ro. 2010. Enhanced weakly trained frontal face detector for surveillance purposes. *2010 IEEE International Conference on Fuzzy Systems (FUZZ)*, 1–8. http://doi.org/10.1109/FUZZY.2010.5584450

[18] Yue Ming and Qiuqi Ruan. 2010. Face stereo matching and disparity calculation in binocular vision system. *2010 2nd International Conference on Industrial and Information Systems (IIS)*, 281–284. http://doi.org/10.1109/INDUSIS.2010.5565855

[19] Richa Mishra and Ravi Subban. 2014. Face detection for video summary using enhancement-based fusion strategy under varying illumination conditions. *2014 International Conference on Science Engineering and Management Research (ICSEMR)*, 1–8. http://doi.org/10.1109/ICSEMR.2014.7043648

[20] R. Mishra and R. Subban. 2014. Face detection for video summary using enhancement-based fusion strategy under varying illumination conditions. *2014 International Conference on Science Engineering and Management Research (ICSEMR)*, 1–8. http://doi.org/10.1109/ICSEMR.2014.7043634

[21] S.J.D. Prince, J.H. Elder, Y. Hou, and M. Sizinstev. 2005. Pre-Attentive Face Detection for Foveated Wide-Field Surveillance. *Seventh IEEE Workshops on Application of Computer Vision, 2005. WACV/MOTIONS '05 Volume 1*, 439–446. http://doi.org/10.1109/ACVMOT.2005.95

[22] R. Raghavendra, K.B. Raja, B. Yang, and C. Busch. 2013. A novel image fusion scheme for robust multiple face recognition with light-field camera. *2013 16th International Conference on Information Fusion (FUSION)*, 722–729.

[23] M. Rusinol, J. Llados, and P. Dosch. 2007. Camera-Based Graphical Symbol Detection. *Ninth International Conference on Document Analysis and Recognition, 2007. ICDAR 2007*, 884–888. http://doi.org/10.1109/ICDAR.2007.4377042

[24] R. Thota, A. Kalyansundar, and Amit Kale. 2009. Modeling and tracking of faces in real-life illumination conditions. *IEEE International Conference on Acoustics, Speech and Signal Processing, 2009. ICASSP 2009*, 761–764. http://doi.org/10.1109/ICASSP.2009.4959695

[25] R. Valenti and T. Gevers. 2012. Accurate Eye Center Location through Invariant Isocentric Patterns. *IEEE Transactions on Pattern Analysis and Machine Intelligence* 34, 9, 1785–1798. http://doi.org/10.1109/TPAMI.2011.251

[26] T. Vijayan, N.A. Kumar, and K. Sivachandar. 2013. An improved low-resolution face tracker system using gradient logarithm field feature space and bi-cubic interpolation. *2013 International Conference on Human Computer Interactions (ICHCI)*, 1–7. http://doi.org/10.1109/ICHCI-IEEE.2013.6887823

[27] Zhifei Wang, Zhenjiang Miao, and Chao Zhang. 2008. Extraction of High-Resolution Face Image from Low-Resolution and Variant Illumination #x0A0; #x0A0;Video Sequences. *Congress on Image and Signal Processing, 2008. CISP '08*, 97–101. http://doi.org/10.1109/CISP.2008.487

Critérios de inclusão dos artigos:

(a) Trabalhos que definirem técnicas de reconhecimento facial.
(b) Trabalhos que definem conceitos de processamento de imagens e de reconhecimento facial.
(c) Trabalhos que se relacionem com o reconhecimento facial em ambientes reais, não controlados e de baixa luminosidade.
(d) Trabalhos que envolvem o reconhecimento facial utilizando câmeras de baixa resolução.

Critérios de exclusão dos artigos:

(a) Trabalhos que não tenham relação com o reconhecimento facial.
(b) Possíveis trabalhos que utilizam técnicas de reconhecimento facial, porém em ambientes controlados, por exemplo, onde há boa iluminação e utilizam câmeras de alta resolução.
(c) Trabalhos que apresentem avaliação superficial, sem apresentar os métodos e técnicas utilizadas.
(d) Trabalhos que realizam o reconhecimento facial utilizando modelos 3D.
(e) Trabalhos que não tenham sido avaliados por seus pares.

Métodos de avaliação:

Os artigos encontrados serão avaliados primeiramente através de seus títulos e resumos, e posteriormente, se necessário, através da leitura de algumas passagens especificas do artigo, como por exemplo a introdução, os resultados e/ou a conclusão. Os artigos serão excluídos se atingirem pelo menos um dos critérios de exclusão preestabelecidos.

Lista de artigos com status de inclusão ou exclusão:

Artigo	Critérios de inclusão atendidos	Critérios de exclusão atendidos	Status
1.	(a)(b)(c)		Incluído
2.	(b)	(a)	Excluído
3.	(b)(c)	(a)	Excluído
4.		(a)	Excluído
5.		(a)	Excluído
6.		(a)	Excluído
7.	(a)(b)(c)(d)		Incluído
8.	(a)(b)(c)(d)		Incluído
9.	(a)(b)(c)		Incluído
10.	(a)(b)		Incluído
11.		(a)	Excluído
12.		(a)	Excluído
13.		(a)	Excluído
14.		(a)	Excluído
15.		(a)	Excluído
16.	(a)(c)		Incluído
17.	(a)		Incluído
18.		(a)	Excluído
19.	(a)(b)(c)(d)		Incluído
20.	ARTIGO REPLICADO: IGUAL AO ARTIGO 19		
21.	(a)(d)		Incluído
22.	(a)(c)		Incluído
23.		(a)	Excluído
24.		(a)	Excluído
25.		(a)	Excluído
26.		(a)	Excluído
27.	(a)(b)(c)(d)		Incluído