IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 2, Issue 1, June 2022
Impact Factor: 6.252

Individual Re-Identification in Blurred Image using SVM/PCA Technique

K. Karthika[1], R. Sulochana[2], M. Gunasundari[3], J. Durgadevi[4]
Assistant Professor, Computer Science and Engineering[1]
Student, Computer Science and Engineering[2,3,4]
Anjalai Ammal Mahalingam Engineering College, Thiruvarur, India

Abstract: *Individual re-identification (Re-ID) is the task of matching a target person across different cameras, which has drawn extensive attention in computer vision and has become an essential component in the video surveillance system. Pre-id can be considered as a problem of image retrieval. Existing person re-identification methods depend mostly on single-scale appearance information. In this work, to address issues, we demonstrate the benefits of a techniques using Support vector machine or Principal component analysis proposed for pre-id in this study. However, great challenges are being faced in the pre-id task. First, in different scenarios, appearance of the same pedestrian changes dramatically by reason of the body misalignment frequently, various background clutters, large variations of camera views and occlusion. Second, in a public space, different pedestrians wear the same or similar clothes. Therefore, the distinctions between different pedestrian images are subtle. These make the topic of pre-id a huge challenge. The proposed methods are only performed in the training phase and discarded in the testing phase, thus, enhancing the effectiveness of the model. Our model achieves the state-of-theart on the popular benchmark datasets including Market-1501, duke mtmc -re-id and CUHK03. Besides, we conduct a set of ablation experiments to verify the effectiveness of the proposed methods.*

Keywords: Re-ID; Blur identification; SVM; Individual Re-identification and PCA**.**

REFERENCES

[1] Jain, A.K. Ross, A. Prabhakar: An Introduction to Biometric Recognition, IEEE Trans. Circuits and Systems for Video Technology 14 No. (Jan 2004).
[2] Zhao, W. Chellapah, R. Philips: Subspace Linear Discriminant for Face Recognition, Center for Automation Research, University of Maryland, College Park, Technical Report CAR-TR-914, 1999.
[3] Suman Kumar, Bhattacharyya, Kumar Rahul, Face Recognition by Linear Discriminant Analysis, Computer Science and Engineering Department, Indian School of Mines, Dhanbad, Jharkhand-826004, India.
[4] International Journal of Advancements in Research & Technology, Volume 1, Issue6, November-2012 1 ISSN 2278-7763
[5] 4th International Colloquium on Signal Processing and its Applications, March 7-9, 2008, Kuala Lumpur, Malaysia.
[6] Y.B.T. Sundari, G. Laxminarayana, G. Vijayalaxmi, Anti-Theft Mechanism Through Face Recognition Using Fpga, Department of Electronics and Communication Engineering, Aurora's Scientific and Technological Institute, Hyderabad, India. Department of Electronics and Communication Engineering, 2, 3 Aurora's Scientific Technological and Research Academy, Hyderabad, India.
[7] S. Balakrishnama, A. Ganapathiraju, Theory of Linear Discriminant Analysis, Institute for Signal and Information Processing, Department of Electrical and Computer Engineering, Mississippi State University.
[8] Xiaoguang Lu, Image Analysis for Face Recognition, Department of Computer Science and Engineering, Michigan State University, East Lansing, MI, 48824
[9] Giuseppe Patan´e and Marco Russo, Enhanced Lbg Algorithm, Institute of Computer Science and Telecommunications, Faculty of Engineering, University of Catania, Viale A. Doria 6, 95125 Catania, Italy.
[10] Y.-C. Chen, X. Zhu, W.-S. Zheng, and J.-H. Lai, "Person re-identification by camera correlation aware feature augmentation," IEEE TPAMI, vol. 40, no. 2, pp. 392–408, 2020.