

DAFTAR PUSTAKA

- [1] M. S. Shakeel and K. M. Lam, “Deep-feature encoding-based discriminative model for age-invariant face recognition,” *Pattern Recognit.*, vol. 93, pp. 442–457, 2019, doi: 10.1016/j.patcog.2019.04.028.
- [2] A. A. Moustafa, A. Elnakib, and N. F. F. Areed, “Age-invariant face recognition based on deep features analysis,” *Signal, Image Video Process.*, vol. 14, pp. 1027–1034, 2020, doi: 10.1007/s11760-020-01635-1.
- [3] O. M. Parkhi, A. Vedaldi, and A. Zisserman, “Deep Face Recognition,” in *Proceedings of the British Machine Vision Conference (BMVC)*, 2015, pp. 41.1-41.12, doi: 10.5244/c.29.41.
- [4] M. Haghighat, M. Abdel-Mottaleb, and W. Alhalabi, “Discriminant Correlation Analysis: Real-Time Feature Level Fusion for Multimodal Biometric Recognition,” *IEEE Trans. Inf. Forensics Secur.*, vol. 11, no. 9, pp. 1984–1996, 2016, doi: 10.1109/TIFS.2016.2569061.
- [5] X. Zhu *et al.*, “Large-Scale Bisample Learning on ID Versus Spot Face Recognition,” *Int. J. Comput. Vis.*, vol. 127, no. 6–7, pp. 684–700, 2019, doi: 10.1007/s11263-019-01162-8.
- [6] H. Zhou and K. M. Lam, “Age-invariant face recognition based on identity inference from appearance age,” *Pattern Recognit.*, vol. 76, pp. 191–202, 2018, doi: 10.1016/j.patcog.2017.10.036.
- [7] Q. Cao, L. Shen, W. Xie, O. M. Parkhi, and A. Zisserman, “VGGFace2: A dataset for recognising faces across pose and age,” 2018, doi: 10.1109/FG.2018.00020.
- [8] F. Wang, J. Cheng, W. Liu, and H. Liu, “Additive Margin Softmax for Face Verification,” *IEEE Signal Process. Lett.*, vol. 25, no. 7, pp. 926–930, 2018, doi: 10.1109/LSP.2018.2822810.
- [9] H. Chen and C. Haoyu, “Face Recognition Algorithm Based on VGG Network Model and SVM,” *J. Phys. Conf. Ser.*, vol. 1229, p. 012015, 2019, doi: 10.1088/1742-6596/1229/1/012015.
- [10] T. Ahonen, A. Hadid, and M. Pietikäinen, “Face description with local binary patterns: Application to face recognition,” *IEEE Trans. Pattern Anal. Mach. Intell.*, 2006, doi: 10.1109/TPAMI.2006.244.
- [11] N. Dalal and B. Triggs, “Histograms of oriented gradients for human detection,” 2005, doi: 10.1109/CVPR.2005.177.

- [12] M. Haghighat, M. Abdel-Mottaleb, and W. Alhalabi, "Discriminant correlation analysis for feature level fusion with application to multimodal biometrics," 2016, doi: 10.1109/ICASSP.2016.7472000.
- [13] K. He, X. Zhang, S. Ren, and J. Sun, "Deep residual learning for image recognition," in *Proceedings of the IEEE Computer Society Conference on Computer Vision and Pattern Recognition*, 2016, pp. 770–778, doi: 10.1109/CVPR.2016.90.
- [14] V. Nair and G. E. Hinton, "Rectified linear units improve Restricted Boltzmann machines," 2010.
- [15] K. Simonyan and A. Zisserman, "Very deep convolutional networks for large-scale image recognition," 2015.
- [16] K. Zhang, Z. Zhang, Z. Li, and Y. Qiao, "Joint Face Detection and Alignment Using Multitask Cascaded Convolutional Networks," *IEEE Signal Process. Lett.*, vol. 23, no. 10, pp. 1499–1503, 2016, doi: 10.1109/LSP.2016.2603342.
- [17] Y. Sun, X. Wang, and X. Tang, "Deep learning face representation from predicting 10,000 classes," in *Proceedings of the IEEE Computer Society Conference on Computer Vision and Pattern Recognition*, 2014, pp. 1891–1898, doi: 10.1109/CVPR.2014.244.
- [18] W. Liu, Y. Wen, Z. Yu, M. Li, B. Raj, and L. Song, "SphereFace: Deep hypersphere embedding for face recognition," in *Proceedings - 30th IEEE Conference on Computer Vision and Pattern Recognition, CVPR 2017*, 2017, pp. 6738–6746, doi: 10.1109/CVPR.2017.713.
- [19] W. Liu, Y. Wen, Z. Yu, and M. Yang, "Large-Margin Softmax Loss for Convolutional Neural Networks," in *International Conference on Machine Learning*, 2016, pp. 507–516, [Online]. Available: <http://arxiv.org/abs/1612.02295>.
- [20] G. B. Huang, M. Ramesh, T. Berg, and E. Learned-Miller, "Labeled Faces in the Wild: A Database for Studying Face Recognition in Unconstrained Environments," 2007, doi: 10.1109/ICB.2016.7550057.
- [21] L. Wolf, T. Hassner, and I. Maoz, "Face recognition in unconstrained videos with matched background similarity," 2011, doi: 10.1109/CVPR.2011.5995566.
- [22] D. Yi, Z. Lei, S. Liao, and S. Z. Li, "Learning Face Representation from Scratch," *arXiv Prepr. arXiv*, vol. 1411.7923, 2014, [Online]. Available: <http://arxiv.org/abs/1411.7923>.
- [23] B. F. Klare *et al.*, "Pushing the frontiers of unconstrained face detection and recognition: IARPA Janus Benchmark A," 2015, doi:

10.1109/CVPR.2015.7298803.

- [24] C. Whitelam *et al.*, “IARPA Janus Benchmark-B Face Dataset,” 2017, doi: 10.1109/CVPRW.2017.87.
- [25] B. Maze *et al.*, “IARPA janus benchmark-C: Face dataset and protocol,” 2018, doi: 10.1109/ICB2018.2018.00033.
- [26] Y. Wen, K. Zhang, Z. Li, and Y. Qiao, “A discriminative feature learning approach for deep face recognition,” in *Computer Vision -- ECCV 2016*, 2016, pp. 499–515, doi: 10.1007/978-3-319-46478-7_31.
- [27] Y. Guo, L. Zhang, Y. Hu, X. He, and J. Gao, “MS-celeb-1M: A dataset and benchmark for large-scale face recognition,” 2016, doi: 10.1007/978-3-319-46487-9_6.
- [28] A. Bansal, A. Nanduri, C. D. Castillo, R. Ranjan, and R. Chellappa, “UMDFaces: An annotated face dataset for training deep networks,” 2018, doi: 10.1109/BTAS.2017.8272731.
- [29] A. Bansal, C. Castillo, R. Ranjan, and R. Chellappa, “The do’s and don’ts for CNN-Based face verification,” 2017, doi: 10.1109/ICCVW.2017.299.
- [30] Suyanto, *Data Mining Untuk Klasifikasi Dan Klasterisasi Data*. Bandung: Informatika, 2019.
- [31] V. Albiero *et al.*, “Identity document to selfie face matching across adolescence,” 2020, doi: 10.1109/IJCB48548.2020.9304906.
- [32] J. Deng, J. Guo, N. Xue, and S. Zafeiriou, “ArcFace: Additive angular margin loss for deep face recognition,” 2019, doi: 10.1109/CVPR.2019.00482.
- [33] Z. Niu, M. Zhou, L. Wang, X. Gao, and G. Hua, “Ordinal regression with multiple output CNN for age estimation,” in *Proceedings of the IEEE Computer Society Conference on Computer Vision and Pattern Recognition*, 2016, pp. 4920–4928, doi: 10.1109/CVPR.2016.532.
- [34] X. Zhao and S. Zhang, “Facial expression recognition based on local binary patterns and kernel discriminant isomap,” *Sensors*, vol. 11, no. 10, pp. 9573–9588, 2011, doi: 10.3390/s111009573.
- [35] J. Cheng, Y. Li, J. Wang, L. Yu, and S. Wang, “Exploiting effective facial patches for robust gender recognition,” *Tsinghua Sci. Technol.*, vol. 24, no. 3, pp. 333–345, 2019, doi: 10.26599/TST.2018.9010090.