

DAFTAR PUSTAKA

- [1] Y. Cheng, L. Jiao, Y. Tong, Z. Li, Y. Hu, and X. Cao, "Directional Illumination Estimation Sets and Multi-Level Matching Metric for Illumination-Robust Face Recognition," *IEEE Access*, vol. 5, pp. 25835–25845, 2017.
- [2] S. Aly and M. Hassaballah, "Face recognition: challenges, achievements and future directions," *IET Comput. Vis.*, vol. 9, no. 4, pp. 614–626, 2015.
- [3] Y. Xu, Z. Li, J. Yang, and D. Zhang, "A Survey of Dictionary Learning Algorithms for Face Recognition," *IEEE Access*, vol. 5, pp. 8502–8514, 2017.
- [4] M. De Marsico, M. Nappi, D. Riccio, and H. Wechsler, "Robust Face Recognition for Uncontrolled Pose and Illumination Changes," *IEEE Trans. Syst. Man, Cybern. Part A Systems Humans*, vol. 43, no. 1, pp. 149–163, 2013.
- [5] H. A. O. Yujie, L. I. N. Jie, and Y. I. N. Shi, "A Multi-Condition Relighting with Optimal Feature Selection to Robust Face Recognition with Illumination Variation," *China Commun.*, vol. 11, no. 6, pp. 99–107, 2014.
- [6] W. Hwang, H. Wang, H. Kim, S. C. Kee, and J. Kim, "Face Recognition System Using Multiple Face Model of Hybrid Fourier Feature Under Uncontrolled Illumination Variation," *IEEE Trans. Image Process.*, vol. 20, no. 4, pp. 1152–1165, 2011.
- [7] S. Wang and G. Luo, "Naturalness Preserved Image Enhancement Using a Priori Multi-Layer Lightness Statistics," *IEEE Trans. Image Process.*, vol. 27, no. 2, pp. 938–948, 2018.
- [8] R. Chandrasekharan and M. Sasikumar, "Fuzzy Transform for Contrast Enhancement of Nonuniform Illumination Images," *IEEE Signal Process. Lett.*, vol. 25, no. 6, pp. 813–817, 2018.

- [9] S. Wang, J. Zheng, H. M. Hu, and B. Li, “Naturalness Preserved Enhancement Algorithm for Non-Uniform Illumination Images,” *IEEE Trans. Image Process.*, vol. 22, no. 9, pp. 3538–3548, 2013.
- [10] H. Ibrahim and S. C. Hoo, “Local Contrast Enhancement Utilizing Bidirectional Switching Equalization of Separated and Clipped Subhistograms,” *Math. Probl. Eng.*, 2014.
- [11] A. B. Petro, C. Sbert, and J.-M. Morel, “Multiscale Retinex,” *Image Process. Line*, vol. 4, pp. 71–88, 2014.
- [12] M. Li, J. Liu, W. Yang, X. Sun, and Z. Guo, “Structure-Revealing Low-Light Image Enhancement Via Robust Retinex Model,” *IEEE Signal Process. Soc.*, vol. 27, no. 6, pp. 2828–2841, 2018.
- [13] S. M. Pizer *et al.*, “Adaptive Histogram Equalization and Its Variations,” *Comput. Vision, Graph. Image Process.*, vol. 39, no. 3, pp. 355–368, 1987.
- [14] R. C. Gonzalez and R. E. Woods, *Digital Image Processing*, 2nd ed. Reading: Addison-Wesley, 1992.
- [15] A. Stark, J, “Adaptive Image Contrast Enhancement Using Generalizations of Histogram Equalization,” *IEEE Trans. Image Process.*, vol. 9, no. 5, pp. 889–896, 2000.
- [16] J. Y. Kim, L. S. Kim, and S. H. Hwang, “An Advanced Contrast Enhancement Using Partially Overlapped Sub-Block Histogram Equalization,” *IEEE Trans. Circuits Syst. Video Technol.*, vol. 11, no. 4, pp. 475–484, 2001.
- [17] Z. Yu and C. Bajaj, “A Fast and Adaptive Method for Image Contrast Enhancement,” in *2004 International Conference on Image Processing (ICIP)*, 2004, pp. 1001–1004.
- [18] W. Zhiming and T. Jianhua, “A Fast Implementation of Adaptive Histogram Equalization,” *2006 8th Int. Conf. Signal Process.*, vol. 2, pp. 3–6, 2006.
- [19] M. Abdullah-Al-Wadud, M. Kabir, M. Akber Dewan, and O. Chae, “A

- Dynamic Histogram Equalization for Image Contrast Enhancement,” *IEEE Trans. Consum. Electron.*, vol. 53, no. 2, pp. 593–600, 2007.
- [20] M. Kim and M. G. Chung, “Recursively Separated And Weighted Histogram Equalization For Brightness Preservation And Contrast Enhancement,” *IEEE Trans. Consum. Electron.*, vol. 54, no. 3, pp. 1389–1397, 2008.
- [21] M. Sundaram, K. Ramar, N. Arumugam, and G. Prabin, “Histogram Based Contrast Enhancement for Mammogram Images,” *Int. Conf. Signal Process. Commun. Comput. Netw. Technol. ICSCCN-2011*, pp. 842–846, 2011.
- [22] B. Liu, W. Jin, Y. Chen, C. Liu, and L. Li, “Contrast Enhancement Using Non-Overlapped Sub-Blocks and Local Histogram Projection,” *IEEE Trans. Consum. Electron.*, vol. 57, no. 2, pp. 583–588, 2011.
- [23] T. Celik and T. Tjahjadi, “Automatic Image Equalization and Contrast Enhancement Using Gaussian Mixture Modeling,” *IEEE Trans. Image Process.*, vol. 21, no. 1, pp. 145–56, 2012.
- [24] G. Raju and M. S. Nair, “A Fast and Efficient Color Image Enhancement Method Based on Fuzzy-Logic and Histogram,” *AEU - Int. J. Electron. Commun.*, vol. 68, no. 3, pp. 237–243, 2013.
- [25] S. Lal and M. Chandra, “Efficient Algorithm for Contrast Enhancement of Natural Images,” *Int. Arab J. Inf. Technol.*, vol. 11, no. 1, pp. 95–102, 2014.
- [26] Y. Gao, H. M. Hu, B. Li, and Q. Guo, “Naturalness Preserved Nonuniform Illumination Estimation for Image Enhancement Based on Retinex,” *IEEE Trans. Multimed.*, vol. 20, no. 2, pp. 335–344, 2018.
- [27] A. Jain, *Fundamentals of Digital Image Processing*. Englewood Cliffs: PRENTICE HALL, 1989.
- [28] R. O. Duda, P. E. Hart, and D. G. Stork, *Pattern Classification*, 2nd ed. Hoboken: Wiley-Interscience, 2001.
- [29] R. C. Gonzalez and R. E. Woods, *Digital Image Processing (3rd Edition)*, 3rd ed. Upper Saddle River: Pearson Prentice Hall, 2007.

- [30] M. Petrou and P. Bosdogianni, *Image Processing: the fundamentals*. New York: Wiley, 1999.
- [31] A. Bovik, *Handbook of Image and Video Processing*, 2nd ed. Cambridge: Academic Press, 2005.
- [32] D. Bansal, R. Bagoria, V. Sharma, and P. G. Student, “Digital Image Enhancement by Improving Contrast, Removal of Noise and Motion Blurring,” *Int. J. Innov. Res. Sci. Eng. Technol.*, vol. 4, no. 4, pp. 2601–2606, 2015.
- [33] P. Hidayatullah, *Pengolahan Citra Digital*. Bandung: Informatika Bandung, 2017.
- [34] K. Gu, G. Zhai, W. Lin, and M. Liu, “The Analysis of Image Contrast: From Quality Assessment to Automatic Enhancement,” *IEEE Trans. Cybern.*, vol. 46, no. 1, pp. 284–297, 2016.
- [35] D. Tohl and J. S. J. Li, “Image Enhancement by S-Shaped Curves Using Successive Approximation for Preserving Brightness,” *IEEE Signal Process. Lett.*, vol. 24, no. 8, pp. 1247–1251, 2017.
- [36] Y. Liu, S. Member, J. Guo, S. Member, and B. Lai, “High Efficient Contrast Enhancement Using Parametric Approximation,” *Int. Conf. Acoust. Speech Signal Process.*, pp. 2444–2448, 2013.
- [37] H. Yue, J. Yang, X. Sun, F. Wu, and C. Hou, “Contrast Enhancement Based on Intrinsic Image Decomposition,” *IEEE Trans. Image Process.*, vol. 26, no. 8, pp. 3981–3994, 2017.
- [38] Z. Hameed and C. Wang, “Contrast Enhancement by Adaptive Mapping Function with Local Information,” in *2011 IEEE 54th International Midwest Symposium on Circuits and Systems (MWSCAS)*, 2011.
- [39] M. R. Faraji and X. Qi, “Face Recognition Under Varying Illumination Based on Adaptive Homomorphic Eight Local Directional Patterns,” *IET Comput. Vis.*, vol. 9, no. 3, pp. 390–399, 2015.

- [40] R. Atta and M. Ghanbari, “Low-Contrast Satellite Images Enhancement using Discrete Cosine Transform Pyramid and Singular Value Decomposition,” *IET Image Process.*, vol. 7, no. 5, pp. 472–483, 2013.
- [41] S. He, Q. Yang, and R. Lau, “Fast Weighted Histograms for Bilateral Filtering and Nearest Neighbor Searching,” *IEEE Trans. Circuits Syst. Video Technol.*, vol. 26, no. 5, pp. 891–902, 2016.
- [42] Y. Zhu and C. Huang, “An Improved Median Filtering Algorithm for Image Noise Reduction,” in *2012 International Conference on Solid State Devices and Materials Science*, 2012, vol. 25, pp. 609–616.
- [43] V. Rohit and J. Ali, “A Comparative Study of Various Types of Image Noise and Efficient Noise Removal Techniques,” *Int. J. Adv. Res. Comput. Sci. Softw. Eng.*, vol. 3, no. 10, pp. 2277–128, 2013.
- [44] A. M. Hambal, Z. Pei, and F. L. Ishabailu, “Image Noise Reduction and Filtering Techniques,” *Int. J. Sci. Res.*, vol. 6, no. 3, pp. 2033–2038, 2017.
- [45] M. E. Celebi, H. A. Kingravi, and Y. A. Aslandogan, “Nonlinear Vector Filtering for Impulsive Noise Removal from Color Images,” *J. Electron. Imaging*, vol. 16, no. 3, pp. 33008–33021, 2007.
- [46] H. Wang, S. Z. Li, Y. Wang, and W. Zhang, “Illumination Modeling and Normalization for Face Recognition,” in *2003 IEEE International SOI Conference*, 2003.
- [47] S. L. Phung, A. Bouzerdoun, and D. Chai, “Skin Segmentation using Color Pixel Classification: Analysis and Comparison,” *IEEE Trans. Pattern Anal. Mach. Intell.*, vol. 27, no. 1, pp. 148–154, 2005.
- [48] M. Yao, “Segmentation-based Illumination Normalization for Face Detection,” in *6th International Workshop on Computational Intelligence and Applications*, 2013, pp. 95–100.
- [49] X. Tan and B. Triggs, “Enhanced Local Texture Feature Sets for Face Recognition Under Difficult Lighting Conditions,” *IEEE Trans. Image*

Process., vol. 19, no. 6, pp. 1635–1650, 2010.

- [50] S. Chen and A. Beghdadi, “Natural Rendering of Color Image based on Retinex,” in *16th IEEE International Conference on Image Processing (ICIP)*, 2009.
- [51] S. Agaian, K. Panetta, and A. Grigoryan, “Transform-based Image Enhancement Algorithms with Performance Measure,” *IEEE Trans. Image Process.*, vol. 10, no. 3, pp. 367–382, 2001.
- [52] B. G. Pratama, “Analisis Perbandingan Metode Pengukuran Jarak Pasangan Titik-Titik Ciri dan Metode Klasifikasi Terhadap Tiga Parameter Kantuk Pengemudi,” Gadjah Mada, 2018.
- [53] K. Diaz-Chito, A. Hernández-Sabaté, and A. López, “A reduced feature set for driver head pose estimation,” *Appl. Soft Comput.*, vol. 45, pp. 98–107, 2016.
- [54] S. Abtahi, M. Omidyeganeh, S. Shirmohammadi, and B. Hariri, “YawDD : A Yawning Detection Dataset,” in *ACM Multimedia Systems*, 2014, pp. 24–28.
- [55] E. H. Land and J. J. McCann, “Lightness and Retinex Theory,” *J. Opt. Soc. Am.*, vol. 61, no. 1, pp. 1–11, 1971.
- [56] E. H. Land, “The Retinex Theory of Color Vision,” *Sci. Am.*, vol. 237, no. 6, pp. 108–128, 1977.
- [57] E. Provenzi, L. Carli, A. Rizzi, and D. Marini, “Mathematical definition and analysis of the Retinex algorithm,” *J. Opt. Soc. Am. A*, vol. 22, no. 12, pp. 2613–2621, 2005.
- [58] E. H. Land, “Recent advances in retinex theory,” *Vision Res.*, vol. 26, no. 1, pp. 7–21, 1986.
- [59] D. J. Jobson, Z. U. Rahman, and G. A. Woodell, “A multiscale Retinex for Bridging the Gap Between Color Images and the Human Observation of Scenes,” *IEEE Trans. Image Process.*, vol. 6, no. 7, pp. 965–976, 1997.
- [60] N. Limare, J. Lisani, J. Morel, and A. B. Petro, “Simplest Color Balance,”

Image Process. Line, vol. 1, pp. 297–315, 2011.

- [61] R. Szeliski, *Computer Vision: Algorithms and Applications*. SPRINGER-VERLAG LONDON LIMITED, 2010.
- [62] S. Paris, P. Kornprobst, J. Tumblin, and F. Durand, *Bilateral Filtering: Theory and Applications*. now Publishers Inc., 2008.
- [63] B. M. Oh, M. Chen, J. Dorsey, and F. Durand, “Image-Based Modeling and Photo Editing,” in *Proceedings of the 28th annual conference on Computer graphics and interactive techniques*, 2001, pp. 433–442.
- [64] C. Tomasi and R. Manduchi, “Bilateral Filtering for Gray and Color Images,” in *International Conference on Computer Vision*, 1998, pp. 839–846.