

DAFTAR PUSTAKA

- [1] K. N. Anil K. Jain, Arun A. Ross, *Introduction to Biometrics*. 2021.
- [2] S. Marcel, M. S. Nixon, and S. Z. Li, *Handbook of Biometric Anti-Spoofing- Trusted Biometrics under Spoofing Attacks*. 2014.
- [3] S. A. C. Schuckers, "Spoofing and Anti-Spoofing Measures," *Inf. Secur. Tech. Rep.*, vol. 7, no. 4, pp. 56–62, 2002, doi: 10.1016/S1363-4127(02)00407-7.
- [4] G. Pan, L. Sun, Z. Wu, and S. Lao, "Eyeblink-based anti-spoofing in face recognition from a generic webcam," *Proc. IEEE Int. Conf. Comput. Vis.*, 2007, doi: 10.1109/ICCV.2007.4409068.
- [5] R. Derakhshani, S. A. C. Schuckers, L. A. Hornak, and L. O’Gorman, "Determination of vitality from a non-invasive biomedical measurement for use in fingerprint scanners," *Pattern Recognit.*, vol. 36, no. 2, pp. 383–396, 2003, doi: 10.1016/S0031-3203(02)00038-9.
- [6] C. C. Broun, X. Zhang, R. M. Mersereau, and M. Clements, "Automatic speechreading with application to speaker verification," *ICASSP, IEEE Int. Conf. Acoust. Speech Signal Process. - Proc.*, vol. 1, pp. 685–688, 2002, doi: 10.1109/ICASSP.2002.5743810.
- [7] P. C. Cattin, D. Zlatnik, and R. Borer, "Sensor fusion for a biometric system using gait," *IEEE Int. Conf. Multisens. Fusion Integr. Intell. Syst.*, pp. 233–238, 2001, doi: 10.1109/mfi.2001.1013540.
- [8] M. A. Shafiq, Z. Wang, A. Amin, T. Hegazy, M. Deriche, and G. AlRegib,

- “Textural Features for Image Classification,” *SEG Tech. Progr. Expand. Abstr.*, vol. 34, pp. 1811–1815, 2015, doi: 10.1190/segam2015-5927230.1.
- [9] Z. Boulkenafet, J. Komulainen, and A. Hadid, “FACE ANTI-SPOOFING BASED ON COLOR TEXTURE ANALYSIS Zinelabidine Boulkenafet , Jukka Komulainen , Abdenour Hadid Center for Machine Vision Research , University of Oulu , Finland,” *2015 IEEE Int. Conf. Image Process.*, pp. 2636–2640, 2015.
- [10] Y. Moon, I. Ryoo, and S. Kim, “Face Antispoofing Method Using Color Texture Segmentation on FPGA,” *Secur. Commun. Networks*, vol. 2021, 2021, doi: 10.1155/2021/9939232.
- [11] Z. Zhang, J. Yan, S. Liu, Z. Lei, D. Yi, and S. Z. Li, “A Face Anti spoofing Database with Diverse Attacks.Pdf,” pp. 2–7, 2012.
- [12] J. Yang, Z. Lei, and S. Z. Li, “Learn Convolutional Neural Network for Face Anti-Spoofing,” 2014, [Online]. Available: <http://arxiv.org/abs/1408.5601>.
- [13] S. Asha and S. P. Kumar, “Face Spoofing Detection Using Machine.”
- [14] Z. Boulkenafet, J. Komulainen, L. Li, X. Feng, and A. Hadid, “OULU-NPU: A Mobile Face Presentation Attack Database with Real-World Variations,” *Proc. - 12th IEEE Int. Conf. Autom. Face Gesture Recognition, FG 2017 - 1st Int. Work. Adapt. Shot Learn. Gesture Underst. Prod. ASLAGUP 2017, Biometrics Wild, Bwild 2017, Heteroge*, pp. 612–618, 2017, doi: 10.1109/FG.2017.77.
- [15] P. Kenda, “Sistem Presensi Berbasis Wajah Dengan Metode Haar Cascade,” *KONSTELASI Konvergensi Teknol. dan Sist. Inf.*, vol. 1, no. 2, pp. 419–429,

2021.

- [16] J. Huang, Y. Shang, and H. Chen, "Improved Viola-Jones face detection algorithm based on HoloLens," *Eurasip J. Image Video Process.*, vol. 2019, no. 1, 2019, doi: 10.1186/s13640-019-0435-6.
- [17] A. Pamungkas, "Model Ruang Warna Pengolahan Citra," 2016. .
- [18] P. W. Agnew and A. S. Kellerman, *Fundamentals of multimedia*, vol. 1. 2008.
- [19] T. Ojala, M. Pietikäinen, and D. Harwood, "A comparative study of texture measures with classification based on feature distributions," *Pattern Recognit.*, vol. 29, no. 1, pp. 51–59, 1996, doi: 10.1016/0031-3203(95)00067-4.
- [20] K.-C. SONG, Y.-H. YAN, W.-H. CHEN, and X. ZHANG, "Research and Perspective on Local Binary Pattern," *Acta Autom. Sin.*, vol. 39, no. 6, pp. 730–744, 2013, doi: 10.1016/s1874-1029(13)60051-8.
- [21] R. Ramachandra and C. Busch, "Presentation attack detection methods for face recognition systems: A comprehensive survey," *ACM Comput. Surv.*, vol. 50, no. 1, 2017, doi: 10.1145/3038924.
- [22] Samsudiney, "Penjelasan Sederhana tentang SVM," *medium.com*, 2019. .
- [23] DQLab, "Pahami Algoritma Machine Learning," 2021. .
- [24] scikit learn, "Gradient Boosting Classifier." .
- [25] V. Michael, "Machine Learning: Mengenal Logistic Regression," 2019. .
- [26] T. De Freitas Pereira, A. Anjos, J. M. De Martino, and S. Marcel, "Can face

anti-spoofing countermeasures work in a real world scenario?,” *Proc. - 2013 Int. Conf. Biometrics, ICB 2013*, 2013, doi: 10.1109/ICB.2013.6612981.

- [27] Simplilearn, “What is Perceptron: A Beginner Guide for Perceptron,” *Simplilearn*, 2021. .
- [28] H. Yasin, A. Prahutama, and T. W. Utami, “Prediksi Harga Saham Menggunakan Support Vector Regression Dengan Algoritma Grid Search,” *Media Stat.*, vol. 7, no. 1, pp. 29–35, 2014, doi: 10.14710/medstat.7.1.29-35.
- [29] A. Alberto Quesada, “5 Algorithms to Train a Neural Network,” *neuraldesigner*.
https://www.neuraldesigner.com/blog/5_algorithms_to_train_a_neural_network (accessed Jan. 15, 2021).
- [30] M. G. Zuhir, “Identifikasi Liveness Detection Menggunakan Ekstraksi Fitur Image Quality Assessment,” 2021.

