

Daftar Pustaka

- [1] ABATE, A. F., NAPPI, M., RICCIO, D., AND SABATINO, G. 2d and 3d face recognition: A survey. *Pattern Recognition Letters* 28 (2007), 1885–1906.
- [2] BAO, W., LI, H., LI, N., AND JIANG, W. A liveness detection method for face recognition based on optical flow field. *Image Analysis and Signal Processing* (2009), 233–236.
- [3] BENGIO, Y., AND GRANDVALET, Y. No unbiased estimator of the variance of k-fold cross-validation. *Journal of Machine Learning Research* 5 (2004), 1089–1105.
- [4] BIOMETRICS, I. J. S.. *Information Technology - Biometric Performance Testing and Reporting, Part 1: Principles and Framework*. 2006.
- [5] BOULKENAFET, Z., KOMULAINEN, J., AND HADID, A. Face spoofing detection using color texture analysis. *IEEE Transactions on Information Forensics and Security* 11 (2016), 1818–1830.
- [6] CHAPELLE, O., HAFFNER, P., AND N. VAPNIK, V. Support vector machines for histogram-based image classification. *IEEE TRANSACTIONS ON NEURAL NETWORKS* 10 (1999), 1055–1064.
- [7] DHRITI, AND KAUR, M. K-nearest neighbor classifier approach for face and fingerprint at feature level fusion. *International Journal of Computer Application (0975-8887)* 60 (2012), 13–17.
- [8] KARTIKA, A. *Analisis Berbasis Tekstur untuk Mendeteksi Spoofing Wajah Manusia*. Universitas Telkom, Bandung, 2017.
- [9] KOLLREIDER, K., FRONTHALER, H., FARAJ, M. I., AND BIGUN, J. Real-time face detection and motion analysis with application in "liveness" assessment. *IEEE Transactions on Information Forensics and Security - Part 2* 2 (2007), 548–558.
- [10] LI, H., WANG, S., AND C.KOT, A. Face spoofing detection with image quality regression. In *Image Processing Theory Tools and Applications (IPTA)*, 2016. IEEE, 2016.

- [11] MÄÄTTÄ, J., HADID, A., AND PIETIKÄINEN, M. Face spoofing detection from single images using micro-texture analysis. *Biometrics, International Joint Conference on 00* (2011), 1–7.
 - [12] MATERKA, A., AND STRZELECKI, M. Texture analysis methods – a review. Tech. rep., INSTITUTE OF ELECTRONICS, TECHNICAL UNIVERSITY OF LODZ, 1998.
 - [13] PAN, G., SUN, L., AND WU, Z. Eyeblink-based anti-spoofing in face recognition from a generic webcam, 2007.
 - [14] PHAN, Q.-T., DANG-NGUYEN, D.-T., BOATO, G., AND NATALE, F. G. B. D. Face spoofing detection using ldp-top. *Image Processing (ICIP), 2016* (2016), 404–408.
 - [15] POWERS, D. Evaluation: From precision, recall and f-measure to roc, informedness, markedness correlation. *Journal of Machine Learning Technologies* 2 (2011), 37–63.
 - [16] RAJU, D. U. S. N., KUMAR, A. S., MAHESH, B., AND REDDY, D. B. E. Texture classification with high order local pattern descriptor: Local derivative pattern. *Global Journal of Computer Science and Technology* 10 (2010), 72–766.
 - [17] REN, H., SUN, J., HAO, Y., YAN, X., AND LIU, Y. Uniform local derivative patterns and their application in face recognition. *Journal of Signal Processing Systems* 74 (2014), 405–416.
 - [18] VISA, S., RAMSAY, B., RALESCU, A., AND VAN DER KNAAP, E. Confusion matrix-based feature selection. *Proceedings of The 22nd Midwest Artificial Intelligence and Cognitive Science Conference 2011* (2011), 120–127.
 - [19] ZHANG, B., GAO, Y., MEMBER, S., ZHAO, S., LIU, J., AND MEMBER, S. Local derivative pattern versus local binary pattern: Face recognition with higher-order local pattern descriptor. *IEEE Trans. Image Process* (2010), 533–544.
- [14] [11] [19] [1] [12] [16] [10] [13] [9] [2] [5] [8] [7] [18] [4] [17] [6] [15] [3]