REFERENCES

1 Ahonen T., Hadid A., Pietikäinen M., "Face description with local binary patterns: Application to Face Recognition," IEEE Trans. PAMI, vol.28(12), pp:2037-2041, 2006.

2 Aina Barcelo, Pilar Sobrevilla and Eduard Montseny, "Robustness and Performance Evaluation of the Fuzzy Texture Spectrum encoding", IEEE International Conference on Fuzzy Systems Sheraton Vancouver Wall Centre Hotel, Vancouver, BC, Canada, pp.16-21, 2006.

3 Abdolhossein Fathi, Ahmad Reza Naghsh-Nilchi, "Noise tolerant local binary pattern operator for efficient texture analysis", Pattern Recognition Letters, vol.33, pp.1093–1100, 2012.

4 Abdulrahman A., AL-JANOBI and AmarNishad M., "Testing and Evaluation of Cross-Diagonal Texture Matrix Method", pp.1-4, 1999.

5 Abdulrahman Al-Janobi, "Performance evaluation of cross-diagonal texture matrix method of texture analysis", Pattern Recognition, vol.34, pp.171-180, 2001.

6 Ahonen T., Hadid A., Pietikäinen M., "Face description with local binary patterns: application to face recognition", IEEE Transactions on Pattern Analysis and Machine Intelligence, vol.28(12), pp.2037–2041, 2006.

7 Ahonen T., Hadid A., Pietikäinen M., "Face recognition with local binary patterns," 8th European Conf. on Computer Vision- 2004, Lecture Notes in Computer Science, vol. 3021, pp:469-481, 2004.

8 Aina Barceloa, Eduard Montsenyb, Pilar Sobrevilla, "Fuzzy Texture Unit and Fuzzy Texture Spectrum for texture characterization", Fuzzy Sets and Systems, vol.158, pp.239–252, 2007.

9 Antonio Fern´andez, Ovidiu Ghita, Elena Gonz´alez, Francesco Bianconi, Paul F. Whelan, "Evaluation of robustness against rotation of LBP, CCR and ILBP features in granite texture classification", Machine Vision and Applications, 2011.

10 Bilal Bataineh, Siti Norul Huda Sheikh Abdullah, Khairuddin Omar, "An adaptive local binarization method for document images based on a novel thresholding method and dynamic windows", Pattern Recognition Letters, vol.32, pp.1805–1813, 2011.

11 Bongjin Jun, Daijin Kim, "Robust face detection using local gradient patterns and evidence accumulation", Elsevier Ltd, pp.1-13, 2012.

12 Burges C.J.C., "A Tutorial on Support Vector Machines for Pattern Recognition", Data Mining and Knowledge Discovery, vol.2, no.2, pp.955-974, 1998.

13 Cardinaux F., Sanderson C., and Bengio S., "Face verification using adapted generative models," IEEE Conf. Automatic Face and Gesture Recognition, pp:825-830, 2004.

14 Chellappa R. and Chatterjee S., "Classification of textures using Gaussian Markov random fields," IEEE Trans. Acoust., Speech, Signal Process. ASSP-33 (4), pp. 959–963, 1986.

15 Chen P.C., and Pavlidis T., "Segmentation by texture using correlation", IEEE Trans. Pattern Anal. PAMI-5, pp.64–69, 1983.

16 Cohen F.S., Fan Z. and Patel M.A., "Classification of Rotated and Scaled Textured Image using Gaussian Markov Random Field Models," IEEE Trans. Pattern Anal. Machine Intell., Vol.13, pp. 192-202, 1991.

17 Conners R.W., "Towards a set of statistical features which measure visually perceivable qualities of texture", in Proc. Pattern Recognition Image Processing Conf., pp.382-390, 1979.

18 Cross G.R. and Jain A.K., "Markov random field texture models", IEEE Trans. Pattern Anal. PAMI-5 (1), pp. 25–39, 1983.

19 David A., Lerner B., "Support vector machine-based image classification for genetic syndrome diagnosis", Pattern Recognition Lett., vol.26(8), pp.1029–1038, 2005.

20 Davis L.S., Johns S.A., and Aggarwal J.K., "Texture analysis using generalized co-occurrence matrices", IEEE Trans. Pattern Anal. PAMI-1, pp. 251–259, 1979.

21 Derin H. and Elliot H., "Modeling and segmentation of noisy and textured images using Gibbs random fields,", IEEE Trans. Pattern Anal. PAMI-9, pp. 39–59, 1987.

22 Dong-Chen HE and Li WANG, "Texture feature extraction from texture spectrum", pp.1997-1991.

23 DONG-CHEN HE and LI WANG, "Texture Unit, Texture Spectrum, And Texture Analysis", IEEE Transactions On Geoscience and Remote Sensing, vol.28(4), 1990.

24 Eswara Reddy B., Chandra Sekhar Reddy P., Vijaya Kumar V., "Texton based shape features on local binary pattern for age classification", Int. Jour. graphics and signal processing, pp.110-116, 2012.

25 Faugeras O.D., and Pratt W.K., "De-correlation methods of texture feature extraction," IEEE Trans. Pattern Anal. PAMI-1, pp.323–332, 1980.

26 Feng X., Pietikäinen M., Hadid A., "Facial expression recognition with local binary patterns and linear programming," PAMI, vol.15(2), pp:546-548, 2005.

27 Galloway M.M., "Texture analysis using gray level run lengths", Comp. Graphics and Image Processing, vol.4, pp.172-179, 1975.

28 Guang-Hai Liu, Jing-Yu Yang, "Image retrieval based on the texton co-occurrence matrix", Pattern Recognition, vol.41 pp.3521 – 3527, 2008.

29 Guang-Hai Liu, LeiZhang, Ying-KunHou, Zuo-YongLi, Jing-YuYang, "Image retrieval based on multi-texton histogram", Pattern Recognition, vol.43, pp.2380–2389, 2010.

30 Haralick R.M., Shanmugan K., and Dinstein I., "Textural features for image classification", IEEE Trans. Sysr., Man., Cybern., vol.3, pp.610-621, 1973.

31 He D.C., and Wang L., "Texture unit, texture spectrum and texture analysis", in Proc of IGARSS.89, Vancouver, Canada, vo1.5, pp.2769-2772, 1989.

32 Heikkila, M., Pietikäinen, M., Schmid, C., "Description of interest regions with local binary patterns", Pattern Recognition, vol.42, pp.425–436, 2009.

33 Heusch G., Rodriguez Y., Marcel S., "Local binary patterns as an image preprocessing for face authentication," The 7th Int.Conf. on Automatic Face and Gesture Recognition, pp:9-14, 2006.

34 Hsu C.W, Chang C.-C., Lin C.-J., "A Practical Guide to Support Vector Classification," Technical Report, Department of Comptuer Science & Information Engineering, National Taiwan University, Taiwan.

35 Hsu C.W, Chang C.-C., Lin C.-J., "LIBSVM: a library for support vector machines," Technical Report, Department of Computer Science and Engineering, National Taiwan University, Taiwan.

36 Hui Zhou, Runsheng Wang, Cheng Wang, "A novel extended local-binary-pattern operator for texture analysis", Information Sciences, vol.178. pp.4314–4325, 2008.

37 Huimin Lu, Zhiqiang Zheng, "Two novel real-time local visual features for omni-directional vision", Pattern Recognition, vol.43 pp.3938–3949, 2010.

38 Jiang X., "Feature extraction for image recognition and computer vision", In 2nd IEEE international conference on computer science and information technology, pp. 1–13, 2009.

39 Jun B.J., Kim T.W., Kim D.J., "A compact local binary pattern using maximization of mutual information for face analysis", Pattern Recogn., vol.44(3) pp:532-543, 2011.

40 Jun-ding Sun, Yuan-yuan Ma, Xiao-yan Wang, Xin-chun Wang, "Image Classification Based on Texture and Improved BP Neural Network", Proceedings of the Third International Symposium on Electronic Commerce and Security Workshops(ISECS'10) Guangzhou, P.R. China, pp.29-31, 2010.

41 Kashyap R.L. and Khotanzed A., "A model based method for rotation invariant texture classification", IEEE Trans. Pattern Anal. PAMI, vol.8(4), pp.472-481, 1986.

42 Khouzani K.J., Hamid S.Z., "Radon transform orientation estimation for rotation invariant texture analysis," IEEE Trans. PAMI, vol.27(6), pp:1004-1008, 2005.

43 Kotsiants S.B., "Supervised Machine Learning: A Review of Classification Techniques", Informatica, vol.31, pp.249-268, 2007.

44 Laws K.L., "Rapid texture identification", Proc. SPIE 238, pp. 376–380, 1980.

45 Leblond I., Legris M., Solaiman B., "Use of classification and segmentation of sidescan sonar images for long term registration", in: IEEE OCEANS'05 EUROPE, Brest, France, pp.20–23, 2005.

46 Lee Y.-G., Lee J.-H., Hsueh Y.-C., "Fuzzy uncertainty texture spectrum for texture analysis", Electron. Lett., vol.31(12), pp.959–960, 1995.

47 Leung, M., & Peterson A.M., "Multiple channel neural network model for texture classification and segmentation", Proceedings of IEEE International Conference on Acoustics, Speech and Signal Processing, Toronto, vol.4, pp.2677-2680, 1991.

48 Li Liu, Lingjun Zhao, Yunli Long, Gangyao Kuang, Paul Fieguth, "Extended local binary patterns for texture classification", Image and Vision Computing, pp.1-14, 2012.

49 Liao S., Chung A.C.S., "Face recognition by using Elongated local binary patterns with average maximum distance gradient magnitude", Computer Vision— ACCV, pp.672–679, 2007.

50 Liao S., Law M.W.K., Chung A.C.S., "Dominant local binary patterns for texture classification", IEEE Transactions on Image Processing, vol.18(5), pp.1107–1118, 2009.

51 Liao S., Zhu X., Lei Z., Zhang L., Li S., "Learning multi-scale block local binary patterns for face recognition", in: International Conference on Biometrics, ICB07, pp.828–837, 2007.

52 Loris Nanni, Alessandra Lumini, Sheryl Brahnam, "Local binary patterns variants as texture descriptors for medical image analysis", Artificial Intelligence in Medicine, vol.49, pp.117–125, 2010.

53 Loris Nanni, Sheryl Brahnam, Alessandra Lumini, "A local approach based on a Local Binary Patterns variant texture descriptor for classifying pain states", Expert Systems with Applications, vol.37, pp.7888–7894, 2010.

54 Loris Nanni, Sheryl Brahnam, Alessandra Lumini, "A simple method for improving local binary patterns by considering non-uniform patterns", Pattern Recognition, pp.1-9, 2012.

55 Loris Nanni, Sheryl Brahnam, Alessandra Lumini, "Local Ternary Patterns from Three Orthogonal Planes for human action classification", Expert Systems with Applications, vol.38

pp.5125–5128, 2011.

56 Lucieer A., Stein P., Fisher, "Multivariate texture-based segmentation of remotely sensed imagery for extraction of objects and their uncertainty", International Journal of Remote Sensing, vol.26(14), pp.2917–2936, 2005.

57 MaÈenpaÈaÈ T., Ojala T., PietikaÈinen M., and Soriano M., "Robust texture classification by subsets of local binary patterns", Proc. 15th Int'l Conf. Pattern Recognition, vol.3, pp. 947-950, 2000.

58 MaÈenpaÈaÈ T., PietikaÈinen M., and Ojala T., "Texture Classification by Multi-Predicate Local Binary Pattern Operators", Proc. 15th Int'l Conf. Pattern Recognition, vol.3, pp.951-954, 2000.

59 Mäenpää T., "The local binary pattern approach to texture analysis-extensions and applications," Academic Dissertation, Infotech Oulu and Department of Electrical and Information Engineering, 2003.

60 Mäenpää T., Ojala T., Pietikäinen M., Soriano M., "Robust texture classification by subsets of local binary patterns," in: 15th Int. conference of Pattern Recognition, vol.3, pp.947-950, 2000.

61 Mäenpää T., Pietikäinen M., Ojala T., "Texture classification by multi-predicate local binary pattern operators," Proc. of 15th Int. conference on Pattern Recognition, pp. 951-954, 2000.

62 Mao J., and Jain A.K., "Texture Classification and Segmentation Using Multiresolution Simultaneous Autoregressive Models", Pattern Recognition, vol.25, pp.173-188, 1992.

63 Marko Heikkil¨, Matti Pietik¨ainen, and Cordelia Schmid, "Description of Interest Regions with Center-Symmetric Local Binary Patterns", ICVGIP 2006, LNCS 4338, pp. 58–69, 2006.

64 Mavroforakis M., Georgiou H., Cavouras D., Theodoridis S., "Significance analysis of qualitative mammographic features, using linear classifiers, neural networks and support vector machines", Eur. J. Radiol., vol.54, pp.80–89, 2005.

65 Meisel W.S., "Computer Oriented Approaches to Pattern Recognition", Academic Press, New York, 1972.

66 Miquel Grau-Sainchez, Eduard Montseny and Pilar Sobrevilla, "On the Use of Fuzzy Texture Spectrum for Homogeneous and Textured Images Discrimination", IEEE. pp.11-17, 2007.

67 Nanni L., Lumini A., "Local binary patterns for a hybrid fingerprint matcher", Pattern Recognition, vol.41, pp.3461–3466, 2008.

68 Ojala T., Mäenpää T., Pietikäinen M., Viertola J., Kyll Outex J., "A new framework for empirical evaluation of texture analysis algorithms," Proceedings of 16th Inter. Conf. on Pattern Recognition, pp:701-706, 2002.

69 Ojala T., PietikaÈinen M., and Harwood D., "A Comparative Study of Texture Measures with Classification Based on Feature Distributions", Pattern Recognition, vol. 29, pp. 51-59, 1996.

70 Ojala T., Pietikäinen M. and Mäenpää T., "A generalized local binary pattern operator for multi-resolution gray scale and rotation invariant texture classification," Machine Vision and Media Processing Unit, Infotech Oulu, University of Oulu, Finland.

71 Ojala T., Pietikäinen M., "Unsupervised texture classification using feature distributions", Pattern Recogn., vol.32, pp.477-486, 1999.

72 Ojala T., Pietikäinen M., Mäenpää T., "Gray scale and rotation invariant texture classification with local binary patterns", Proceedings of Sixth European conference on Computer Vision, pp.404-420, 2000.

73 Ojala T., Pietikäinen M., Mäenpää T., "Multi-resolution gray-scale and rotation invariant texture classification with local binary patterns", IEEE Trans. Pattern Anal., vol.24, pp.971–987, 2002.

74 Ojala T., Pietikäinen M., Mäenpää T., Viertola J., Kyllönen J., Huovinen S., "Outex-new framework for empirical evaluation of texture analysis algorithms," In: Proc. 16th Int. Conf. on Pattern Recognition, vol.1, pp:701–706, 2002(b).

75 Ojala T., Valkealahti K., Oja E., Pietikäinen M., "Texture discrimination with multidimensional distributions of signed gray level differences," Pattern Recogn., vol.34, pp.727-739, 2001.

76 Otsuka K., Horikoshi T., Suzuki S., and Fujii M., "Feature Extraction of Temporal Texture Based on Spatiotemporal Motion Trajectory," Proc. Int'l Conf. Pattern Recognition, vol.2, pp.1047-1051, 1998.

77 Park S.B., Lee J.W., Kim S.K., "Content-based image classification using a neural network", Pattern Recognition Lett., vol.25(3), pp.287–300, 2004.

78 Pavlidis T., "Image analysis", Ann. Rev. Comput. Sci., vol.3, pp.121-146, 1988.

79 Petrou M., Garcia-Sevilla P., "Image processing: Dealing with texture", Wiley, 2006.

80 Pietik¨ainen M., Nurmela T., M¨aenp¨a¨a T., Turtinen M., "View-based recognition of real-world textures", Pattern Recognition, vol.37 (2), pp: 313-323, 2004.

81 Pietikäinen M., Ojala T., Xu Z., "Rotation-invariant texture classification using feature distributions," Pattern Recogn., vol. 33 , pp:43-52, 2000.

82 Qingyong Li, Zhiping Shi, "Texture Image Retrieval Using Compact Texton Co-occurrence Matrix Descriptor", ACM, pp.83-90, 2010.

83 Raghu P. P., Poongodi R., and Yegnanarayana B., "Texture Classification Using a Two-stage Neural Network Approach", Proceedings of 1993 International Joint Conference on Neural Networks, 1993.

84 Raghu P.P., Poongodi R., and Yegnanarayanaa B., "Combined Neural Network Approach for Texture Classification", Neural Networks, vol.8(6), pp.975-987, 1995.

85 Ramana Reddy B.V., Radhika Mani M., Sujatha B., Vijaya Kumar V., "Texture classification based on Random Threshold Vector Technique", International Journal of Multimedia and Ubiquitous Engineering (IJMUE), vol.5, iss.1, 2010.

86 Russ J.C., "The Image Processing Handbook", CRC Press, 2002.

87 Sklansky J., "Image segmentation and feature extraction", IEEE Trans. Syst. Man Cybernet., vol.8(4), pp.237–247, 1978.

88 Sujatha B., Vijaya Kumar V., Chandra Mohan M., "Rotationally Invariant Texture Classification Using LRTM Based On Fuzzy Approach", International Journal of Computer Applications (IJCA), vol.33(4), pp.1-5, 2011.

89 Sujatha B., Vijaya Kumar V., Chandra Mohan M., "Rotationally Invariant Texture Classification Using LRTM Based On Fuzzy Approach", International Journal of Computer Applications (IJCA), vol.33(4), pp.1-5, 2011.

90 Sujatha B., VijayaKumar V., Ramabai M., "Morphological primitive patterns with grain components on LDP for child and adult age classification," IJCA, vol.21, Iss.3, pp.50-55, 2011.

91 Takala V., Ahonen T., and Pietik¨ainen M., "Block-based methods for image retrieval using local binary patterns," Proceedings of 14th SCIA, pp.882-891, 2005.

92 Tang H.L., Sun Y.F., Yin B.C., Ge Y., "Face recognition based on Haar LBP histogram," ICACTE 2010, vol.6, pp.6235-6238, 2010.

93 Taur J.S., Tao C.W., "Texture classification using a fuzzy texture spectrum and neural networks", J. Electron. Imaging, vol.7(1) pp.29–35, 1998.

94 Timo Ojala, Matti Pietikäinen and Topi Mäenpää, "Gray Scale and Rotation Invariant Texture Classification with Local Binary Patterns", Machine vision, Proceedings of Sixth European conference on Computer Vision, pp.404-420, 2000.

95 Tivive F.H., Bouzerdoum A., "Texture Classification using Convolutional Neural Networks", IEEE, 2006.

96 Umarani C., Ganesan L., Radhakrishnan S., "Combined Statistical and Structural Approach for Unsupervised Texture Classification", IJISE, vol.2(1), pp.162-165, 2008.

97 Unser M., "Local linear transforms for texture measurements", Signal Process., vol.11, pp.61–79, 1986.

98 Unser M., "Texture classification and segmentation using wavelet frames," IEEE Trans. Image Process., vol.4(11), pp. 1549– 1560, 1995.

99 Varma M., Zisserman A., "A statistical approach to texture classification from single images", International journal of computer vision, vol.62, pp.61-81, 2005.

100 Venkata Rami Reddy G., Vijaya Kumar V., Sujatha B., "A Novel Texture Synthesis Algorithm Using Patch Matching by Fuzzy Texture Unit," International Journal on Computer Science and Engineering (IJCSE), vol.4, no.01, 2012.

101 Venkatesh Y.V., Raja S.K., "On the classification of multispectral satellite images using the multilayer perceptron", Pattern Recognition, vol.36(8), pp.161–175, 2003.

102 **Venkateswarlu Y.,** Murthy J.V.R., Vijayakumar V., "Image Classification Based on Centre Symmetric Fuzzy Texture Unit Matrix", Int. Journal of Scientific Engineering and Research, vol.3, issue 11, 2012.

103 **Venkateswarlu Y.,** Sujatha B., Murthy J.V.R., "A New Approach for Texture Classification Based On Average Fuzzy Left Right Texture Unit Approach", Int. Journal of Image Graphics and signal Processing, Vol.4, 2012.

104 **Venkateswarlu Y.,** Sujatha B., Vijayakumar V., "Extraction of Texture Information from Fuzzy Run Length Matrix", International Journal of Computer Applications, vol.55, 2012.

105 Vijayakumar V., "Usage of Morphological Methods in the Characterization of Textures", Ph.D thesis.

106 Vistex.Colour Image Database, Http://ww.whitemedia.mit.edu/vismod/imagery/visiontexture.

107 Wang L. and He D.C., "Texture classification using texture spectrum", Pattern Recognition, 1989.

108 Wang L., and He D.C., "A new statistical approach for texture analysis", Photo-grammemic Engineering & Remote Sensing, vol.56(l), pp.61-66, 1990.

109 Wang L., He D.C., and Fabbri A., "Textural filtering for SAR image processing", in Proc. of IGARSS'89, Vancouver, Canada, vol.5, pp.2785-2788, 1989.

110 Weszka J.S., Dyer C.R., and Rosenfeld A., "A comparative study of texture measures for terrain classification", IEEE Trans. Syst., Man, Cybern., vol.SMC-6, pp.269–285, 1976.

111 Wiselin Jiji G., Ganesan L., "A new approach for unsupervised segmentation", Applied Soft Computing, vol.10, pp.689–693, 2010.

112 Wiselin Jiji G., Ganesan L., "Comparative analysis of colour models for colour textures based on feature extraction," Int. Jour. of Soft computing, vol.2(3), pp:361-366, 2007.

113 Xianglin Meng, ZhengzhiWang, LizhenWu, "Building global image features for scene recognition", Pattern Recognition, vol.45 pp.373–380, 2012.

114 Xiaoou Tang, "Texture information in Run-Length matrices", IEEE Transactions on Image Processing, vol.7, no.11, pp.1602-1609, 1998.

115 Zhang W., Shan H., Chen X., Gao W., "Local gabor binary patterns based on mutual information for face recognition", Int.Journal of Image Graphics, vol.7(4), pp.777–93, 2007.

116 Zhenhua Guo, Lei Zhang, David Zhang, "A completed modeling of local binary pattern operator for texture classification," IEEE Transactions on Image Processing, pp.1-7, 2010.

117 Zhenhua Guo, Lei Zhang, David Zhang, "Rotation invariant texture classification using LBP variance (LBPV) with global matching", Pattern Recognition, vol.43, pp.706–719, 2010.

118 Brodatz P., "Texture-A Photographic Album for Artists and Designers", New York: Reinhold, vol.16, pp.33-43, 1968.