

## REFERENCES

- [1] Fix, E., Hodges, J., "Discriminatory analysis, nonparametric discrimination: Consistency properties", Technical Report 4, USAF School of Aviation Medicine, 1951.
- [2] Cover, T. M. and Hart, P. E., "Nearest neighbor pattern classification", IEEE Transactions on Information Theory 13, 1967 , pp.21–27.
- [3] Imandoust, S. B. and Bolandraftar, M., "Application of K-Nearest Neighbor (KNN) Approach for Predicting Economic Events: Theoretical Background", Journal of Engineering Research and Applications, Vol. 3, Issue 5, Sep-Oct 2013, pp.605-610.
- [4] Parvin, H., Alizadeh, H. and Bidgoli, B. M., "Modified K-Nearest Neighbor", Proceedings of the World Congress on Engineering and Computer Science 2008, San Francisco, USA October 22 - 24, 2008.
- [5] Cunningham, P. and Delany, S. J., "k-Nearest Neighbour Classifiers", Technical Report UCD-CSI-2007-4, March 27, 2007.
- [6] Nivre, J., "optimizing a deterministic dependency parser of unrestricted Swedish text", Proceedings of Promote IT, Gotland University, May 3-5, 2003.
- [7] Charles, E., "Nearest Neighbor Classification" , January 11, 2011.
- [8] Keller, J. M., Gray M. R. and Givens Jr., J.A., "A Fuzzy K-Nearest Neighbor Algorithm", IEEE Transactions on systems, man, and cybernetics, Vol. SMC-15, No. 4, pp. 580 – 585, 1985.

- [9] Keller, J. M. and Hunt, D. J., "Incorporating Fuzzy Membership Functions into the Perceptron Algorithm", IEEE Transactions on pattern analysis and machine intelligence, Vol. PAMI-7, No. 6, November 1985.
- [10] Phitakwinai, S., Auephanwiriyakul, S. and Theera-Umpon, N., "Thai sign language translation using fuzzy c-means and scale invariant feature transform", Lecture Notes in Computer Science, Vol 5073, 2008, pp. 1107 – 1119.
- [11] Bacon, D., "Introduction to Formal Methods in Computer Science Chomsky Normal Form", Department of Computer Science & Engineering, University of Washington, View Notes - lec14 from COMPUTER 243 at ASU.
- [12] Fu, K. S., "Syntactic Pattern Recognition and Applications", New York: Prentice-Hall, 1982.
- [13] Lee, M. H., Kim, S. H., Lee, G. S., Kim, S. H. and Yang, H. J., "Correction for Misrecognition of Korean Texts in Signboard Images using Improved Levenshtein Metric", KSII transactions on internet and information systems, Vol. 6, No. 2, Feb. 2012.
- [14] Liu, H. H. and Fu, K. S., "An Application of Syntactic Pattern Recognition to Seismic Discrimination", IEEE transactions on geoscience and remote sensing, vol. ge-21, no. 2, april 1983.
- [15] Heryadi, Y. , Fanany, M. I. and Arymurthy, A. M., "Stochastic Regular Grammar-based Learning for Basic Dance Motion Recognition", ICACSIS 2013 ISBN: 978-979-1421-19-5.
- [16] Clark, A., "Learning Trees from Strings: A Strong Learning Algorithm for some Context-Free Grammars", Journal of Machine Learning Research 14, pp. 3537-3559, 2013.

- [17] Klomsae, A., Auephanwiriyakul, S. and Theera-Umpon, N., "A Novel String Grammar Fuzzy C-Medians", Proceedings of the 2015 IEEE International Conference on Fuzzy Systems, Istanbul, Turkey, August 2015.
- [18] Fix, E. and Hodges, J., "Discriminatory Analysis: Nonparametric Discrimination: Consistency Properties", 1951.
- [19] Yigit, H., "ABC-based distance-weighted kNN algorithm", Journal of Experimental & Theoretical Artificial Intelligence, 2014.
- [20] Zadeh, L. A., "Fuzzy sets," Inform. Contr., Vol. 8, pp. 338-353, 1965.
- [21] Chomsky, N., "Syntactic Structures", Howard B. Lasnik, Mouton Publishers, The Hague, Paris, Series Minor, N.R. 4, 1957.
- [22] Dechang, C. and Cheng, X., "Pattern Recognition and String Matching", Springer Science & Business Media, Vol. 13. , 2013.
- [23] Levenshtein, V. I., "Binary codes capable of correcting deletions, insertions, and reversals", Sov. Phys.-Dokl., vol. 10, Feb 1966, pp.707-710.
- [24] Yang, M.S. and Wu, K.L., "Unsupervised possibilistic clustering", Pattern Recognition 39, pp. 5-21, 2006.
- [25] Haldar, R. and Mukhopadhyay, D., "Levenshtein Distance Technique in Dictionary Lookup Methods: An Improved Approach", Web Intelligence & Distribution Computing Research Lab Green Tower, C-9/1, Golf Green, Calcutta 700095, India.
- [26] Schimke, S. and Vielhauer, C., "Similarity searching for on-line handwritten documents", Journal on Multimodal User Interfaces, Vol. 1, No. 2, 2007.

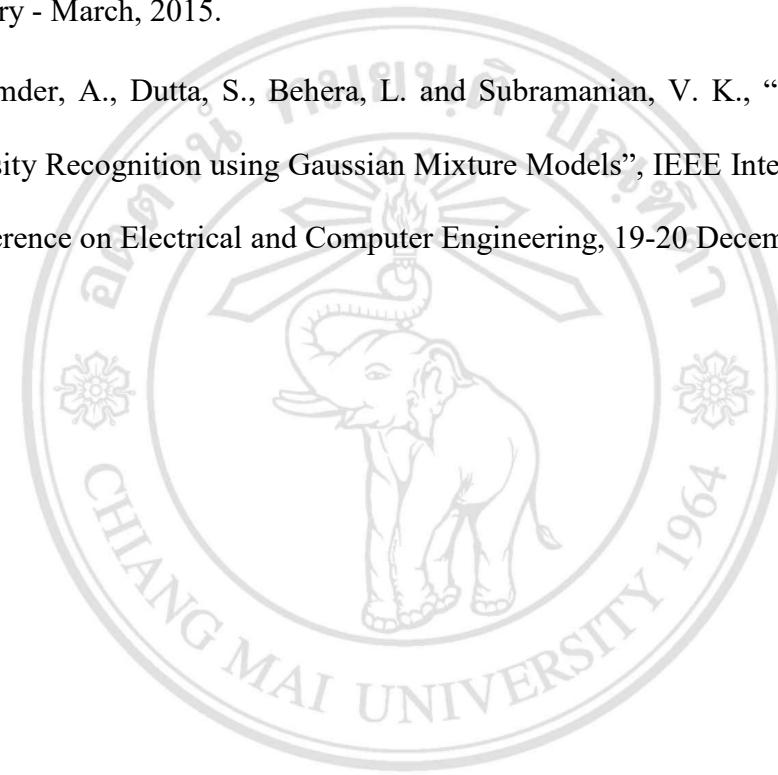
- [27] Ware, C., "Color Sequences for Univariate Maps: Theory, Experiments, and Principles", IEEE Computer Graphics and Applications, pp. 41-49, Sept 1988.
- [28] Bezdek, J. C., Keller, J., Krishnapuram, R. and Pal, N. R., "Fuzzy Models and Algorithms for Pattern Recognition and Image Processing", Kluwer Academic Publishers, USA., 1999.
- [29] Wang, L., Ji, H., Gao, X., "MR Brain Image Segmentation Using a Possibilistic Entropy Based Clustering Method", Lab. 202 of School of Electronic Engineering, Xidian University, Xi'an 710071, China, IEEE, ICSP'04 Proceedings, 2004.
- [30] Ganguly, S., Bose D. and Konar, A., "Clustering using Vector Membership: An Extension of the Fuzzy C-Means Algorithm", Fifth International Conference on Advanced Computing (ICoAC), 2013.
- [31] Yang, D. R., Lan, L. S. and Pao, W. C., "A New Fuzzy Entropy Clustering Method with Controllable Membership Characteristics", MWSCAS '06. 49th IEEE International Midwest Symposium on, Aug 6-9, 2006.
- [32] Jain, R. and Abraham, A., "A Comparative Study of Fuzzy Classification Methods on Breast Cancer Data", 7<sup>th</sup> International Work Conference on Artificial and Natural Neural Networks, IWANN'03, Spain, 2003.
- [33] Krishnapuram, R., and Keller, J. M., "A Possibilistic Approach to Clustering", IEEE transactions on fuzzy systems, Vol. 1, No. 2, May, 1993.
- [34] Phillips, P.J., Beveridge, J.R., Draper, B.A., Fivens, G., O'Toole, A.J., Bolme, D., Dunlop, J., Lui, Y.M., Sahibzada, H. and Weimer, S., "The Good, the Bad, and the Ugly Face Challenge Problem", Image and Vision Computing, 30, pp. 177-185, 2012.

- [35] Chandrasekhar, V., Takacs, G., Chen, D., Tsai, S., Grzeszczuk R. and Girod, B., “CHoG: Compressed Histogram of Gradients A Low Bit-Rate Feature Descriptor”, IEEE Conference on Computer Vision and Pattern recognition, pp. 2504 – 2511, 2009.
- [36] Psyllos, A., Anagnostopoulos, C.N. and Kayafas, E., “Vehicle model recognition from frontal view image measurements”, Computer Standards & Interfaces, 33, pp. 142–151, 2011.
- [37] Dalal, N. and Triggs, B., “Histograms of Oriented Gradients for Human Detection”, IEEE Computer Society Conference on Computer Vision and Pattern Recognition, pp. 886 – 893, 2005.
- [38] Kimia-216 dataset, <http://www.dabi.temple.edu/~shape/MPEG7/dataset.html>
- [39] ORL Face Database, AT&T Laboratories Cambridge, 1992-1994.
- [40] FEI face database, <http://fei.edu.br/~cet/facedatabase.html>
- [41] Georghiades, A., Yale face database, Center for computational Vision and Control at Yale University, <http://cvc.cs.yale.edu/cvc/projects/yalefaces/yalefaces.html>, 2002.
- [42] Japanese Female Facial Expression (JAFFE) Database, <http://www.kasrl.org/jaffe.html>.
- [43] Pain expressions , [http://pics.psych.stir.ac.uk/2D\\_face\\_sets.htm](http://pics.psych.stir.ac.uk/2D_face_sets.htm).
- [44] Senthilkumar database, <http://www.geocities.ws/senthilirtt/Senthil%20Face%20Database%20Version1>.
- [45] PICS - Psychological Image Collection at Stirling, <http://pics.psych.stir.ac.uk/>

- [46] Wang, Y., "Face Recognition by Nonsubsampled Contourlet Transform and Support Vector Machine", in Z. Zhong (Ed.), Proceedings of the International Conference on Information Engineering and Applications (IEA), Vol. 1, pp. 595- 600, 2012.
- [47] Advanced Multimedia Processing Lab  
<http://chenlab.ece.cornell.edu/projects/FaceAuthentication/download.html>
- [48] Georgia Tech Face Database, <ftp://ftp.ee.gatech.edu/pub/users/hayes/facedb/>.
- [49] Yang, M. H., Ahuja, N. and Kriegman, D., "Face Recognition Using Kernel EigenFaces", 2000 International Conference on Image Processing, pp. 37 – 40, 2000.
- [50] Chen, L., Man, H. and Nefian., A.V., "Face recognition based on multi-class mapping of fisher scores," Pattern Recognition, Vol. 38, No. 6. pp. 799–811, 2005.
- [51] Mohamed, B. and Mohamed, S., "Face Recognition using Two dimensional Subspace Analysis and PNN", International Journal of Computer Applications, Vol. 72, No. 6, May 2013.
- [52] Zhang, J., Li, S. z. and Wang, J., "Manifold Learning and Applications in Recognition", in Y-P. Tan, K. H. Yap, and L. Wang (Eds.), Intelligent Multimedia Processing with Soft Computing, pp. 281- 300, 2005.
- [53] Sugar, G. V., Barker, S. Y., Raja, K. B. and Venugopal, K. R., "Convolution based Face Recognition using DWT and Feature Vector Compression", Third International Conference on Image Information Processing, 2015.

- [54] Valarmathy, S., Arun, K. M. and Sangeetha, R., “Evaluation of Face Recognition Using Vector Features In Local Pattern Descriptors”, Third International Conference on Devices, Circuits and Systems (ICDCS'16), 2016.
- [55] Ting, K. C., Bong, D. B. L. and Wang, Y. C., “Performance Analysis of Single and Combined Bit-Planes Feature Extraction for Recognition in Face Expression Database”, Proceedings of the International Conference on Computer and Communication Engineering, May 13-15, 2008.
- [56] Kanade, T., Cohn, J., Tian, Y., “Comprehensive Database for Facial Expression Analysis”, IEEE Int. Conf. Autom. Face Gesture Recog., March, pp.46-53, 2000.
- [57] Lucey, P. , Cohn J.F., Prkachin, K.M. , Solomon P.E., Matthews, I., “PAINFUL DATA: The UNBC-McMaster Shoulder Pain Expression Archive Database”, IEEE International Conference on Automatic Face and Gesture Recognition (FG2011), Santa Barbara, USA, 2011.
- [58] Owusu, E., Zhan, Y., and Mao, Q. R., “A Neural-AdaBoost based Facial Expression Recognition System”, Expert Systems with Applications, pp. 3383 – 3390, 2014.
- [59] Rania, S.E.S., Kholy, A.E., Nahas, M.Y.E., “Robust Facial Expression Recognition via Sparse Representation and Multiple Gabor filters”, International Journal of Advanced Computer Science and Applications (IJACSA), Vol. 4, No. 3, 2013.
- [60] Yang, J., Zhang, D. and Frangi,A.F., “Two-Dimensional PCA:A New Approach to Appearance-Based Face Representation and Recognition”, IEEE transactions on pattern analysis and machine intelligence, Vol. 26, no. 1, January, 2004.

- [61] Lee, C-S. and Elgammal, A., "Facial Expression Analysis Using Nonlinear Decomposable Generative Models", Analysis and Modelling of Faces and Festures (LNCS), vol 3723, pp. 17 – 31, 2005.
- [62] Happy, S. L., "Automatic Facial Expression Recognition Using Features of Salient Facial Patches", IEEE transactions on affective computing, Vol. 6, No. 1, January - March, 2015.
- [63] Majumder, A., Dutta, S., Behera, L. and Subramanian, V. K., "Shoulder Pain Intensity Recognition using Gaussian Mixture Models", IEEE International WIE Conference on Electrical and Computer Engineering, 19-20 December, 2015.



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