

## List of publications of Dr. Nikhil R. Pal

### Books

1. **Evolutionary and Swarm Intelligence Algorithms**, *Springer Verlag*, (Co-editors J. Bansal and P. Singh), 2018.
2. **Advanced Techniques in Data mining and Knowledge discovery**, *Springer Verlag*, (co-editor L. C. Jain), 2005.
3. **Neural Information Processing- ICONIP 2004**, Springer Verlag, LNCS 3316, (Co-editor N. Kasabov, R Mudi, S. Pal and S. Parui), 2004.
4. **Advances in Soft Computing - AFSS 2002**, *Springer Verlag*, LNAI 2275, 2002 (Co-editor M. Sugeno)
5. **Pattern Recognition in Soft Computing Paradigm**, *World Scientific*, FLSI Vol. 2, 2001 (Editor)
6. **Fuzzy Models and Algorithms for Pattern Recognition and Image Processing**, *Kluwer Academic Publisher*, 1999, (co-authored with J. C. Bezdek, J. M. Keller and R. Krishnapuram)
7. **Advances in Pattern Recognition and Digital Techniques- ICAPRDT'99**, *Narosa Publishing Co.*, India, 1999 (Co-editors A. K. De and J. Das)

### Journal publications:

1. Huaqin Zhang, Jian Wang, Zhanquan Sun, Jacek M. Zurada, and Nikhil R. Pal, Feature Selection for Neural Networks Using Group Lasso Regularization, *IEEE Transactions on Knowledge and Data Engineering*, 2019, to appear
2. Hao Zhang, Nikhil R. Pal, Yin Sheng, and Zhigang Zeng, Distributed Adaptive Tracking Synchronization for Coupled Reaction-Diffusion Neural Network *IEEE Transactions on Neural Networks and Learning Systems* Accepted.
3. Jian Wang, Qingquan Chang, Qin Chang, Yusong Liu and Nikhil R. Pal, Weight noise injection-based MLPs with group lasso penalty: Asymptotic Convergence and application to node pruning, *IEEE Transactions on Cybernetics*, 2018, to appear.
4. Tao Gao, Jian Wang, Bingjie Zhang, Huaqing Zhang, Peng Ren, and Nikhil R. Pal, A Polak-Ribière-Polyak conjugate gradient-based neuro-fuzzy network and its convergence, *IEEE Access*, Vol. 7, pp 41551 - 41565, 2018, DOI: 10.1109/ACCESS.2018.2848117.
5. Kaustuv Nag, Tandra Pal, Rajani K. Mudi, and Nikhil R. Pal, Robust Multiobjective Optimization with Robust Consensus, *IEEE Trans. on Fuzzy Systems*, 2018, DOI: 10.1109/TFUZZ.2018.2848261.
6. Ignacio Montes, Nikhil R. Pal, and Susana Montes, Entropy Measures for Atanassov intuitionistic fuzzy sets based on divergence, *Soft Computing*, August 2018, Volume 22, Issue 15, pp 50515071, DOI <https://doi.org/10.1007/s00500-018-3318-3>
7. Bikram Karmakar, Nikhil R Pal, How to make a neural network say Dont know. *Information Sciences*.Vol 430-431, pp 444-466, March 2018
8. R. Panja and N. R. Pal, MS-SVM: Minimally Spanned Support Vector Machine, *Applied soft Computing*, DOI 10.1016/j.asoc.2017.12.017, Vol 64; pp 356-365 March 2018.
9. C-T Lin, T-Y Hsieh, Y-T Liu, Y-Y Lin, C-N Fang, Y-K Wang, G Yen, N. R. Pal, C-H Chuang, Minority Oversampling in Kernel Adaptive Subspaces for Class Imbalanced Datasets, *IEEE Trans. on Knowledge and Data Engineering*, DOI 10.1109/TKDE.2017.2779849, Nov 2017.
10. Liu, Yu-Ting, Nikhil R. Pal, Amar R. Marathe, Yu-Kai Wang, and Chin-Teng Lin. "Fuzzy Decision-Making Fuser (FDMF) for Integrating Human-Machine Autonomous (HMA) Systems with Adaptive Evidence Sources." *Frontiers in neuroscience*, 11 (332), DOI: <https://doi.org/10.3389/fnins.2017.0033> 2017.

11. G. Ochoa, I. Lizasoain, D. Paternain, H. Bustince, and Nikhil R Pal, From quantitative to qualitative orness for Lattice OWA operators, *International Journal of General Systems*, doi:10.1080/03081079.2017.131936. Vol. 46(6), pp 640-669, 2017.
12. Chung, I-Fang, Yi-Cheng Chen, and Nikhil Pal. "Feature selection with controlled redundancy in a fuzzy rule based framework." *IEEE Transactions on Fuzzy Systems*, 10.1109/TFUZZ.2017.2688358, March 2017.
13. P. Dey, K. Nag, T. Pal, and Nikhil R. Pal, Regularizing Multi-Layer Perceptron for Robustness, *IEEE Trans. on Systems, Man, and Cybernetics: Systems*, 10.1109/TSMC.2017.2664143, February 2017.
14. Yu-Ting Liu, Nikhil R. Pal, Shang-Lin Wu, Amar Marathe and Chin-Teng Lin, Weighted Fuzzy Dempster-Shafer Framework for Multi-Modal Information Integration, *IEEE Transactions on Fuzzy Systems*, DOI 10.1109/TFUZZ.2017.2659764, January 2017.
15. Prantik Chatterjee and Nikhil R. Pal, Construction of synergy networks from gene expression data related to disease, *GENE*, May 21, 2016. doi: 10.1016/j.gene.2016.05.029.
16. A. Pathak and Nikhil R. Pal, Clustering of mixed data by integrating fuzzy, probabilistic and collaborative clustering framework, *International Journal of Fuzzy Systems*, 2016, 10.1007/s40815-016-0168-y
17. Prantik Chatterjee, and Nikhil R. Pal, Discovery of synergistic genetic network: a minimum spanning tree-based approach. *Journal of bioinformatics and computational biology*, Vol. 14 (1), 2016, pp 1650003-19, DOI: 10.1142/S0219720016500037.
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24. Kaustuv Nag and Nikhil R Pal, A Multiobjective Genetic Programming based Ensemble for Simultaneous Feature Selection and Classification, *IEEE Transactions on Cybernetics*, DOI 10.1109/TCYB.2015.2404806, Vol. 46 (2), PP 499-510; 2016.
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