## **Selected Articles**

## **Proff. Francesco Camastra and Angelo Ciaramella**

## Part I

- 1. B. Scholkopf et al, **Nonlinear component analysis as a kernel eigenvalue problem**, Neural Computation, 10(5), 1299-1319, 1998 (8464 citations)
- 2. C.K.I. Williams and D. Barber, **Bayesian classification with Gaussian Processes**, IEEE Trans. on Pattern Analysis and Machine Intelligence, 20(12), 1342-1351, 1998 (743 citations)
- 3. A. Ben-Hur, **Support Vector Clustering**, Journal of Machine Learning Research 2 (Dec), 125-137, 2001. (1538 citations)
- 4. M. Girolami, **Mercer kernel-based clustering in Feature Space**, IEEE Trans. on Neural Networks, 13(3), 780-784, 2002 (911 citations)
- 5. I. Guyon, A. Elisseeff, **An introduction to variable and feature selection**, Journal of machine learning research, 2003 (13967 citations)
- H. Peng et al, Feature Selection Based on Mutual Information: Criteria of Max-Dependency, Max-Relevance, and Min-Redundancy, IEEE Trans. on Pattern Analysis and Machine Intelligence, 1226-1238, 2005 (7107 citations)
- 7. D. Lowd, C. Meek, **Adversarial Learning**, Proceedings of the 11<sup>th</sup> ACM SIGKDD international conference on Knowledge Discovery in data mining", 2005.
- 8. GE Hinton et al, **A fast learning algorithm for deep belief nets**, Neural Computations, 18(7), 1527-1554, 2006 (11811 citations)
- 9. IS. Dhillon et al., **Weighted graph cuts without eigenvector a multilevel approach**, IEEE Trans. on Pattern Analysis and Machine Intelligence, 2007 (824 citations)
- 10. M. Filippone et al, **A Survey of Kernel and Spectral Methods for Clustering**, Pattern Recognition, 41(1), 176-190, 2008 (862 citations)
- 11. PA Estevez et al, **Normalized Mutual Information Feature Selection**, IEEE Trans. on Neural Networks, 20(2), 189-201, February 2009 (730 Citations)
- 12. R. Salakhutdinov and G. Hinton, **Deep Boltzmann machines**, Artificial Intelligence and Statistics, 2009. (1876 citations)
- 13. J. Read et a, Classifier chains for multi-label classification, 85(3), 333, 2011 (1125 citations)
- 14. AC. Damianou and N.D. Lawrence, Deep Gaussian Processes, **Artificial Intelligence and Statistics**, 2013 (458 citations)

15. N. Srivastava et al, **Dropout: a simple way to prevent neural networks from overfitting**, The Journal of machine learning research, 15(1), 1929-1958, 2014 (16557 citations)

## Part II

- 1. J.K. Karhunen et al., **Generalizations of Principal Component Analysis**, Optimization Problems, and Neural Networks, Neural Networks, vol. 8, no. 4, pp. 549-562, 1995
- 2. F.-L. Vincent; et al., **An Introduction to Deep Reinforcement Learning**, Foundations and Trends in Machine Learning, 11 (3–4): 219–354, 2018
- 3. H. Kaiming, **Deep Residual Learning for Image Recognition**, IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2016
- R. Socher et al., Recursive Deep Models for Semantic Compositionality Over a Sentiment Treebank, Proceedings of the 2013 Conference on Empirical Methods in Natural Language Processing, pp. 1631–1642, 2013
- 5. S. J. Pan et al., A Survey on Transfer Learning, IEEE Transactions on Knowledge and Data Engineering, vol. 22, issue 10, 2010
- 6. A. Krizhevsky et al., **ImageNet Classification with Deep Convolutional Neural Networks**, Advances in Neural Information Processing Systems 25 (NIPS 2012)
- 7. N. Tishby et al., **Deep learning and the information bottleneck principle**, IEEE Information Theory Workshop (ITW), 2015
- 8. D. J. C. MacKay, A Practical Bayesian Framework for Backpropagation Networks, Neural Computation, Volume 4 | Issue 3 | May 1992, p.448-472
- 9. A. Radford et al., **Unsupervised Representation Learning with Deep Convolutional Generative Adversarial Networks**, ICLR 2016
- 10. A.-R. Mohamed et al., **Acoustic Modeling Using Deep Belief Networks**, IEEE Transactions on Audio, Speech, and Language Processing, Vol. 20, Issue: 1, Jan. 2012
- 11. T. Mikolov et al., **Distributed Representations of Words and Phrases and their Compositionality**, Proceeding NIPS'13 Proceedings of the 26th International Conference on Neural Information Processing Systems Volume 2, Pages 3111-3119
- 12. A. Graves et al., **Speech recognition with deep recurrent neural networks**, IEEE International Conference on Acoustics, Speech and Signal Processing, 2013
- 13. D. Guera et al., **Deepfake Video Detection Using Recurrent Neural Networks**, 15th IEEE International Conference on Advanced Video and Signal Based Surveillance (AVSS), 2018

- 14. G.-B. Huang et al., Extreme learning machine: Theory and applications, Neurocomputing, Volume 70, Issues 1–3, 2006, Pages 489-501
- 15. A. Ciaramella et al., **Fuzzy relational neural network**, International Journal of Approximate Reasoning, Volume 41, Issue 2, 2006, Pages 146-163