

List of Publications

Horst Bunke
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Reviewed Journal Papers

1. Andreas Fischer, [Kaspar Riesen](#), [Horst Bunke](#): Improved quadratic time approximation of graph edit distance by combining Hausdorff matching and greedy assignment. [Pattern Recognition Letters 87](#): 55-62 (2017)
2. Riesen, K., Fischer, A. & Bunke, H.: On the impact of using utilities rather than costs for graph matching, *Neural Processing Letters* (2017). DOI [org/10.1007/s11063-017-9739-7](#)
3. Riesen, K., Bunke, H.: Estimating graph edit distance using lower and upper bounds of bipartite approximations, *Int. Journal of Pattern Recognition and Art. Intelligence*, published online, February 2015, DOI [10.1142/S0218001415500111](#)
4. Riesen, K., Ferrer, M., Bunke, H.: Approximate graph edit distance in quadratic time, *SI IEEE TCBB*, Vol PP, Issue 99, 2015, DOI [10.1109/TCBB.2015.2478463](#)
5. Riesen, K., Bunke, H.: Improving bipartite graph edit distance approximation using various search strategies, *Pattern Recognition 48*, 2015, 1345 - 1359
6. Dahm, N., Bunke, H., Caelli, T., Y. Gao: Efficient subgraph matching using topological node feature constraints, *Pattern Recognition 48*, 2015, 317 - 330
7. Fischer, A., Suen, C.Y., Frinken, V., Riesen, K., Bunke, H.: Approximation of graph edit distance based on Hausdorff matching, *Pattern Recognition 48*, 2015, 331 - 343
8. Frinken, V., Fischer, A., Baumgärtner, M., Bunke, H.: Keyword spotting for self-training of BLSTM NN based handwriting recognition systems, *Pattern Recognition 47(3)*, 2014, 1073 - 1082
9. F. Zamora-Martinez, F., Frinken, V. Espana-Boquera, S., Castro-Bleda, M.J. Fischer, A., Bunke, H.: Neural network language models for off-line handwriting recognition, *Pattern Recognition 47(4)*, 2014, 1642 - 1652
10. Richiardi, J., Achard, S., Bunke, H., Van De Ville, D.: Machine learning with brain graphs: predictive modeling approaches for functional imaging in systems neuroscience, *IEEE Signal Processing Magazine 30(3)*, 2013, Article 6494687, 58-70
11. Gibert, J., Valveny, E., Bunke, H.: Embedding of graphs with discrete attributes via label frequencies, *Int. Journal of Pattern Recognition and Art. Intelligence 27(3)*, 2013, DOI: [10.1142/S0218001413600021](#)
12. Zhang, H., Wang, D.-H., Liu, Ch.-L., Bunke, H.: Keyword spotting from online Chinese handwritten documents using one-versus-all character classification model, *Int. Journal of Pattern Recognition and Art. Intelligence 27(3)*, 2013, DOI: [10.1142/S0218001413530017](#)
13. Borzeshi, E., Piccardi, M., Riesen, K., Bunke, H.: Discriminative prototype

- selection methods for graph embedding, *Pattern Recognition* 46(6), 2013, 1648-1657
14. Fankhauser, S., Riesen, K., Bunke, H., Dickinson. P.: Suboptimal graph isomorphism using bipartite matching, *Int. Journal of Pattern Recognition and Art. Intelligence* 26(6), 2012, 1250013-1 - 1250013-26
 15. Gibert, J., Valveny, E., Bunke, H.: Graph embedding in vector spaces by nodes attribute statistics, *Pattern Recognition* 45(9), 3072-3083, 2012
 16. Gibert, J., Valveny, E., Bunke, H.: Feature selection on node statistics based embedding of graphs, *Pattern Recognition Letters* 33(15), 1980 – 1990, 2012
 17. Jiang, X., Lambers, M., Bunke, H.: Structural performance evaluation of curvilinear structure detection algorithms with application to retinal vessel segmentation, *Pattern Recognition Letters* 33(15), 2048 – 2056, 2012
 18. V. Frinken, A. Fischer, R. Manmatha, and H. Bunke. A novel word spotting method based on recurrent neural networks, *IEEE Trans. PAMI* 34(2), 211 – 224, 2012.
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 23. H. Bunke and K. Riesen. Recent advances in graph-based pattern recognition with applications in document analysis. *Pattern Recognition*, 44(5):1057–1067, 2011.
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Books and Special Issues of Journals

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