2 Publications

Many of my publications are very highly cited: my top five publications according receive 900, 120, 90, 90, 70 citations according to google scholar. Please visit my google citation page for the latest counts: http://scholar.google.com/citations?user=mMifMdoAAAAJ

Submitted papers

S. Bubeck, M. Meila, and U. von Luxburg. How the initialization affects the stability of the k-means algorithm. Submitted to ESAIM: Probability and Statistics, under revision, 2011.

M. Hein U. von Luxburg, A. Radl. Hitting and commute times in large graphs are often misleading. Submitted to Journal of the ACM, 2011.

M. Maier, U. von Luxburg, and M. Hein. How the result of graph clustering methods depends on the construction of the graph. Submitted to ESAIM: Probability and Statistics, under revision, 2010.

Papers in peer-reviewed journals and peer-reviewed conferences

M. Alamgir and U. von Luxburg. Phase transition in the familiy of p-resistances. In *Neural Information Processing Systems (NIPS)*, 2011.

S. Kpotufe and U. von Luxburg. Pruning nearest neighbor cluster trees. In *International Conference on Machine Learning (ICML)*, 2011.

D. Garcia-Garcia, U. von Luxburg, and R. Santos-Rodriguez. Risk-based generalizations of f-divergences. In *International Conference on Machine Learning (ICML)*, 2011.

U. von Luxburg, A. Radl, and M. Hein. Getting lost in space: Large sample analysis of the commute distance. In *Neural Information Processing Systems (NIPS)*, 2010.

M. Alamgir and U. von Luxburg. Multi-agent random walks for local clustering. In *International Conference on Data Minig (ICDM)*, 2010.

U. von Luxburg. Clustering stability: An overview. *Foundations and Trends in Machine Learning*, 2(3): 235–274, 2010.

S. Bubeck and U. von Luxburg. Nearest neighbor clustering: A baseline method for consistent clustering with arbitrary objective functions. *Journal of Machine Learning Research*, 10:657 – 698, 2009.

M. Maier, M. Hein, and U. von Luxburg. Optimal construction of k-nearest neighbor graphs for identifying noisy clusters. *Theoretical Computer Science*, 410(19):1749 – 1764, 2009a.

S. Jegelka, A. Gretton, B. Schölkopf, B. Sriperumbudur, and U. von Luxburg. Generalized clustering via kernel embeddings. In B. Mertsching, M. Hund, and Z. Aziz, editors, *Proceedings of the 32nd Annual Conference on Artificial Intelligence (KI)*. Springer, Berlin, 2009.

U. von Luxburg and V. Franz. A geometric approach to confidence sets for ratios: Fieller's theorem, generalizations, and bootstrap. *Statistica Sinica*, 19(3):1095 – 1117, 2009.

M. Maier, U. von Luxburg, and M. Hein. Influence of graph construction on graph-based clustering measures. In D. Koller, D. Schuurmans, Y. Bengio, and L. Bottou, editors, *Advances in Neural Information Processing Systems (NIPS)*. 2009b. **For this paper, M. Maier received the NIPS Best Student Paper Award.**

S. Ben-David and U. von Luxburg. Relating clustering stability to properties of cluster boundaries. In R. Servedio and T. Zhang, editors, *Proceedings of the 21rst Annual Conference on Learning Theory (COLT)*, pages 379 – 390. Springer, Berlin, 2008.

U. von Luxburg, S. Bubeck, S. Jegelka, and M. Kaufmann. Consistent minimization of clustering objective functions. In J.C. Platt, D. Koller, Y. Singer, and S. Roweis, editors, *Advances in Neural Information Processing Systems (NIPS) 21*. MIT Press, Cambridge, MA, 2008.

M. Maier, M. Hein, and U. von Luxburg. Cluster identification in nearest-neighbor graphs. pages 196–210, 2007. **For this paper, M. Maier received the ALT Best Student Paper Award.**

U. von Luxburg. A tutorial on spectral clustering. *Statistics and Computing*, 17(4):395 – 416, 2007.

M. Hein, J.-Y. Audibert, and U. von Luxburg. Graph Laplacians and their convergence on random neighborhood graphs. *Journal of Machine Learning Research*, 8:1325 – 1370, 2007.

U. von Luxburg, M. Belkin, and O. Bousquet. Consistency of spectral clustering. *Annals of Statistics*, 36(2):555 – 586, 2008.

S. Ben-David, U. von Luxburg, and D. Pal. A sober look on clustering stability. In G. Lugosi and H. Simon, editors, *Proceedings of the 19th Annual Conference on Learning Theory*, pages 5 – 19. Springer, Berlin, 2006. **For this paper, D. Pal received the COLT Best Student Paper Award.**

M. Hein, J.-Y. Audibert, and U. von Luxburg. From graphs to manifolds - weak and strong pointwise consistency of graph Laplacians. In P. Auer and R. Meir, editors, *Proceedings of the 18th Annual Conference on Learning Theory (COLT)*, pages 470 – 485. Springer, Berlin, 2005. **For this paper, M. Hein received the COLT Best Student Paper Award.**

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U. von Luxburg, O. Bousquet, and B. Schölkopf. A compression approach to support vector model selection. *Journal for Machine Learning Research*, 5:293 – 323, 2004b.

U. von Luxburg and O. Bousquet. Distance-based classification with Lipschitz functions. In B. Schölkopf and M.K. Warmuth, editors, *Proceedings of the 16th Annual Conference on Learning Theory (COLT)*, pages 314 – 328. Springer, 2003. **For this paper I received the COLT Best Student Paper Award.**

Books

S. Kakade and U. von Luxburg, editors. *Proceedings of the 24th Annual Conference on Learning Theory, June 9-11, Budapest, Hungary*, volume 19 of *JMLR Workshop and Conference Proceedings*, 2011.

U. von Luxburg. *Statistical Learning with Similarity and Dissimilarity Functions*. PhD thesis, Technical University of Berlin, 2004.

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U. von Luxburg, R. Williamson, and I. Guyon. Clustering: Science or art. To appear, 2011.

U. von Luxburg and B. Schölkopf. Statistical learning theory: Models, concepts, and results. In S. Hartmann D. Gabbay and J. Woods, editors, *Handbook for the History of Logic, vol. 10*, pages 751–706. Elsevier, 2011.

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