

SVM-based learning object ranking with a tilted time window

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ABSTRACT

When improving Mean Average Precision (MAP) in information retrieval and ranking algorithms, there is either no solution that is holistically optimum, or the solution is too computationally costly. Although SVM algorithms are capable of learning from data and generating models that maximize the margin of error, they do so in a competent manner. To determine the relevance of a learning item, it is necessary to examine its value in relation to time. Being adequate is a dynamic idea that varies with usage, demands and growth of a learning object. Learning item rating and retrieval is proposed in this work, which includes the the LO weight is assigned .

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References

- [1] J.A.K. Suykens, Vandewalle, "Least Squares Support Vector Machine Classifiers," Neural Processing Letters, Volume 9, Issue 3, pp 293-300. June (1999).
- [2] V. Vapnik, "Statistical Learning Theory." Wiley (1998).
- [3] C. Burges, "A tutorial on Support Vector Machines for Pattern Recognition." Data Mining and Knowledge Discovery, Kluwer Academic Publishers (1998).
- [4] R. Duda, P. Hart, and D. Stork, "Pattern Classification,." John-Wiley, 2nd edition.(2000).
- [5] S. Gong et al., "Dynamic Vision: From Images to Face Recognition,." Imperial College Press, (sections 3.6.2, 3.7.2).(2001).
- [6] M. Pontil and Verri, "Support vector machines for 3D object recognition", IEEE Transaction on Pattern Analysis and Machine Intelligence, Vol. 20, no. 6, pp. 637-646. (1998).
- [7] Corts, C. and Vapnik, V.N, "Support Vector Networks. Machine Learning", 20, 273-297. (1995).
- [8] Jason Weston, "Support Vector Machine and Statistical Learning Theory Tutorial,." NEC Labs America 4 IndependenceWay, Princeton, USA.
www.cs.columbia.edu/~kathy/cs4701/documents/jason_svm_tutorial.pdf

- [9] Vapnik, V. N. "Statistical Learning Theory," New York: John Wiley & Sons.(1998)
- [10] Mojan, C. Papageorgiou and T. Poggio,"Example-based object detection in images by components," IEEE Transaction On Pattern Analysis and Machine Intelligence, Vol. 23, no. 4, pp. 349-361.(2001)
- [11] Tom Mitchell, William Cohen, Ray Mooney, "Text Classification."
www.cs.utexas.edu/~mooney/.../svm.ppt
- [12] B. Moghaddam, M. Yang, "Gender Classification with SVM," IEEE Conference on Face and Gesture Recognition, pp. 306-311. (2000)
- [13] W. Chu and S. Keerthi, "New Approaches to Support Vector Ordinal Regression." Proceedings of International Conference on Machine Learning. (2005)
- [14] Schuldt, C. Laptev, I. Caputo, B, "Recognizing human actions: a local SVM approach," In Pattern Recognition, ICPR-2004, IEEE 17th International Conference on (Vol. 3, pp. 32-36).
- [15] Bron, E., Smits, M., van Swieten, J., Niessen, W., & Klein, "Feature Selection Based on SVM Significance Maps for Classification of Dementia. In Machine Learning in Medical Imaging (pp. 272-279). Springer International Publishing. S. (2014).