

[IMAGE]

Adaptive Filtering Software: Rocchio, Centroid, and kNN with inverted file heuristic.

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Overview

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Acknowledgments

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Acknowledgments

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Source code used:

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The Lemur Toolkit for Language Modeling and Information Retrieval:
<http://www-2.cs.cmu.edu/~lemur/>

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Numerical Recipes: <http://www.library.cornell.edu/nr/bookcpdf.html>

References

Project Reports at the main MMS Working Group page (<http://www.stat.rutgers.edu/~madigan/mms/>):

- Andrei Angheliescu, David D. Lewis, Vladimir Menkov, and Paul Kantor. "Training a Rocchio classifier for adaptive filtering". (TREC 2002).
- David D. Lewis and Vladimir Menkov. "A Closer Look at Nearest Neighbor Text Classification". May 2003.
- David D. Lewis, S. Muthukrishnan, R. Ostrovsky, M. Strauss. "Towards Fast, Effective Nearest Neighbor Text Classification". November 2002. (A number of randomized projection methods referred to in that paper are implemented by this software, but as they are not particularly effective, they are not documented here).

Internal reports on the results of kNN experiments (<http://aplab.rutgers.edu/vmenkov/>):

- [kNN runs on RCV1-v2](#) (January 2003)
- [kNN runs on WIPO-alpha](#) (Summer 2003)
- [kNN with Inverted List Heuristics \(ILH\)](#) (Summer-Fall 2003)
- [On the optimal neighborhood size k for individual topics](#) (September 2003)

Information on the RCV1-v2 corpus (LYRL):

- David D. Lewis, Yiming Yang, Tony Rose, and Fan Li. RCV1: "A New Benchmark Collection for Text Categorization Research". Journal of Machine Learning Research, 2004. It is expected to appear in early 2004 on the JMLR web site, <http://www.jmlr.org/>. A draft version of the article is available as a local copy in [draft7-pdflatex.pdf](#).
- Data at David Lewis' site: <http://www.daviddlewis.com/resources/testcollections/>.
- T. Rose, M. Stevenson, M. Whitehead: "The Reuters Corpus Volume 1 - from Yesterday's News to Tomorrow's Language Resources".
http://about.reuters.com/researchandstandards/corpus/LREC_camera_ready.pdf

Information on the WIPO-alpha corpus:

- WIPO site: <http://www.wipo.int/ibis/datasets/index.html>
- Our internal report on corpus preparation: <http://aplab.rutgers.edu/vmenkov/wipo/index.html>

TREC:

- [Text REtrieval Conference \(TREC\)](#)

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Feedback

Questions, comments, bug reports welcome by email: vmenkov@aplab.rutgers.edu