## **Fuzzy Clustering for Topic Analysis and Summarization of Document Collections**

Submitted by rene [1] on Sat, 2010-08-07 07:15

- <u>DUC/TAC</u> [2]
- Summarization [3]
- Fuzzy Sets & Systems [4]

Title Fuzzy Clustering for Topic Analysis and Summarization of

Document Collections
Conference Paper

Publication Type Conferenc Year of Publication 2007 Refereed Designation Refereed

Authors

Witte, R. [5], and S. Bergler [6]

Editors

Kobti, Z. [7], and D. Wu [8]

Conference Name Proceedings of the 20th Canadian Conference on Artificial

Intelligence (Canadian A.I. 2007)

Tertiary Title LNAI
Volume 4509
Pagination 476–488
Date Published May 28–30
Publisher Springer

Conference Location Montréal, Québec, Canada ISBN Number 978-3-540-72664-7

ISBN Number 978-3-540-72664 Abstract Large document

Large document collections, such as those delivered by Internet search engines, are difficult and time-consuming for users to read and analyse. The detection of common and distinctive topics within a document set, together with the generation of multi-document summaries, can greatly ease the burden of information management. We show how this can be achieved with a clustering algorithm based on fuzzy set theory, which (i) is easy to implement and integrate into a personal information system, (ii) generates a highly flexible data structure for topic analysis and summarization, and (iii) also delivers excellent

performance.

Notes Our paper received the best paper award at Canadian AI 2007,

which had an acceptance rate of 17.7%.

URL <a href="http://www.springerlink.com/content/hn505mw73w70x5vt/fullte">http://www.springerlink.com/content/hn505mw73w70x5vt/fullte</a>

<u>xt.pdf</u> [9]

DOI <u>10.1007/978-3-540-72665-4\_41</u> [10]

Copyright © 2007 Springer-Verlag. This is the author's version

of the work. It is posted here by permission of Springer for your

personal use. Not for redistribution.

Acceptance Rate 17.7%

Attachment Size fuzzy clustering CAI2007.pdf [11] 375.22 KB

Semantics for the Masses

## Fuzzy Clustering for Topic Analysis and Summarization of Document Collections

Published on semanticsoftware.info (https://www.semanticsoftware.info)



Except where otherwise noted, all original content on this site is copyright by its author and licensed under a <u>Creative Commons</u> <u>Attribution-Share Alike 2.5 Canada License</u>.

## Source URL (retrieved on 2025-12-21 23:10):

https://www.semanticsoftware.info/biblio/fuzzy-clustering-topic-analysis-and-summarization-document-collections

## Links:

- [1] https://www.semanticsoftware.info/users/rene
- [2] https://www.semanticsoftware.info/category/project/ductac
- [3] https://www.semanticsoftware.info/category/topic/nlp/summarization
- [4] https://www.semanticsoftware.info/category/topic/fuzzy-sets-systems
- [5] https://www.semanticsoftware.info/biblio/author/1
- [6] https://www.semanticsoftware.info/biblio/author/7
- [7] https://www.semanticsoftware.info/biblio/author/46
- [8] https://www.semanticsoftware.info/biblio/author/47
- [9] http://www.springerlink.com/content/hn505mw73w70x5vt/fulltext.pdf
- [10] http://dx.doi.org/10.1007/978-3-540-72665-4\_41
- [11] https://www.semanticsoftware.info/system/files/fuzzy\_clustering\_CAI2007.pdf