

3_Year Report of Publications

PUBLICATIONS

Edited Contributions

- J.-T. Yao, V. V. Raghavan and Z. Wu (Guest Eds.), Special Issue on "Web Information Fusion," *International J. of Information Fusion*, 2007 (in print).
- J. Han, B. W. Wah, V. V. Raghavan, X. Wu and R. Rastogi (Eds.), "Proc. of the Fifth International Conference on Data Mining," IEEE Press, November 2005.

Book Chapters

- B. Shah, R. Benton, Z. Wu, V. Raghavan, "Automatic and Semi-automatic Annotation Techniques for Images," *Semantic-Based Visual Information Retrieval*, (Yu-Jin Zhang, ed.), IRM Press, Hershey, PA, pp. 112-134, 2007 (ISBN 1-59904-370-X).
- Y. Xie, V. Raghavan, "A Probabilistic Logic-based Framework for Characterizing Knowledge Discovery in Databases," in *Foundations of Data Mining and Knowledge Discovery*, (Y. Y. Lin, S. Ohsuga, C. J. Lian, S. Tsumoto, eds.), Springer-Verlag, Berlin-Heidelberg, pp. 87-100, 2005 (ISBN 3-540-26257-1).
- V. Raghavan, N. Gudivada, Z. Wu, W. Grosky, "Information Retrieval," in *The Practical Handbook of Internet Computing*, (Munindar P. Singh, ed.), Chapman and Hall/CRC Press, Part-2, Ch. 12, 2004.
- K. Efe, V. Raghavan, A. Lakhotia, "Content and Link Structure Analysis for Searching the Web," *Computational Web Intelligence: Intelligent Technology for Web Applications*, (Y.-Q. Zhang, A. Kandel, T. Y. Lin and Y. Y. Yao, eds.), World Scientific Press, pp. 431-448, Aug 2004.

Refereed Journal Papers

- Y. Xie and V. V. Raghavan, "Language-Modeling Kernel Based Approach for Information Retrieval," *Journal of the American Society for Information Science and Technology*, 2007 (accepted).
- Y. Chang, M. Kim and V. Raghavan, "Construction of Query Concepts Based on Feature Clustering of Documents," *Information Retrieval*, Vol. **9**, 2006, pp. 231-248.
- B. Shah, V. Raghavan, P. Dhatric and X. Zhao, "A Cluster-Based Approach for Efficient Content-Based Image Retrieval using a Similarity-preserving Space Transformation Method," *Journal of the American Society for Information Science and Technology*, **57**(12), 2006, pp. 1694-1707.
- J. Choi, M. Kim and V. Raghavan, "Adaptive Relevance Feedback Method of Extended Boolean Model using Hierarchical Clustering Techniques," *Information Processing & Management*, **42**(2), March 2006, pp. 331-349.
- B. Shah, K. Ramachandran and V. Raghavan, "A Hybrid Approach for Data Warehouse View Selection," *International J. of Data Warehousing & Mining*, **2**(2), April-June 2006, pp. 1-37.
- Y. Xie, V. Raghavan, P. Dhatric and X. Zhao, "A New Fuzzy Clustering Algorithm for Optimally Finding Granular Prototypes," in *International Journal of Approximate Reasoning, Special Issue on Data Mining and Granular Computing*, **40** (1-2), July 2005, pp. 109-124. (Ranked #11 in Fall 2005 for frequency of papers accessed on-line from the journal).

Refereed Papers in Conference Proceedings

- S. Chu, J. Chen, Z. Wu, V. V. Raghavan and H. Chu. A Treemap-based Result Interface for Search Engine Users, *12th International Conference on Human-Computer Interaction (HCI 2007)*, Beijing, China, July 2007 (accepted).
- A. De, E. D. Diaz and V. V. Raghavan, "On Fuzzy Result Merging for Metasearch," in (Eds.), *Proceedings of the IEEE International Conference on Fuzzy Systems- FUZZ-IEEE 2007*, Imperial College, London, UK, July 2007 (accepted).
- A. De, E. D. Diaz and V. V. Raghavan, "A Fuzzy Search Engine Weighted Approach to Result Merging for Metasearch," in (Eds. A. An, J. Stefanowski, S. Ramanna, C. J. Butz, W. Pedrycz and G. Wang), *Proceedings of the 11th International Conference, RSFDGrC 2007*, Toronto, Canada, May 2007, pp. 95-102.
- A. Doloc-Mihu and V. V. Raghavan, "Fusion and Kernel Type Selection in Adaptive Image Retrieval," in (ed. B. V. Dasarathy), *Multisensor, Multisource Information Fusion: Architectures, Algorithms, and Applications (DS22)*, SPIE Defense and Security, DSS2007, Volume 6571, Orlando, FL, April 9-13, 2007.
- A. Doloc-Mihu and V. V. Raghavan, "Three-Way Aspect Model (TWAPM) and Co-Training for Mining Image Collections," in (ed. B. V. Dasarathy), *Data Mining, Intrusion Detection, Information Assurance, and Data Networks Security (DS21)*, SPIE Defense and Security, DSS2007, Volume 6570, Orlando, FL, April 9-13, 2007.
- A. Doloc-Mihu and V. V. Raghavan, "Score Distribution Approach to Automatic Kernel Selection for Image Retrieval Systems," *Proceedings of the 16th International Symposium on Methodologies for Intelligent Systems (ISMIS 2006)*, Springer, LNAI/LNCS, vol. 4203, Bari, Italy, September 27-29, 2006, pp. 443-452.
- A. Doloc-Mihu and V. V. Raghavan, "Selecting the Kernel Type for a Web-based Adaptive Image Retrieval System (AIRS)," *Internet Imaging VII, SPIE-IS&T Electronic Imaging*, San Jose, CA, January 19, 2006.
- M. K. Elteir, K.M. Ahmed, V. V. Raghavan and A.M. Hafez, Scalabale, Adaptive Distributed Association Rule Mining Algorithms for Skewed Datasets, in (Eds. G. Di Fatta, M. R. Berthold and S. Parthasarathy), *Proceedings of the Workshop on Parallel Data Mining*, in conjunction with ECML/PKDD 2006 conference, Berlin, Germany, Sept. 2006.
- P. Kuntala and V. V. Raghavan, "Fusion Based Methodology for Spatial Clustering," in (Eds. C. Claramunt, S. Saltinis, and K.-J. Li), *Proceedings of the Third Workshop on Spatio-Temporal Database Management, STDBM 2006*, in conjunction with VLDB 2006, Seoul, Korea, Sept. 2006.
- A. Doloc-Mihu and V. V. Raghavan, "Using Score Distribution Models to Select the Kernel Type for a Web-based Adaptive Image Retrieval System," in (Eds. H. Sundaram, M. Naphade, J. R. Smith, Y. Rui), *Proceedings of the Image and Video Retrieval: 5th International Conference, CIVR 2006*, Tempe, AZ, USA, July 13-15, 2006, pp. 443-442.
- Y. Xie, M. Nagarajan, V. V. Raghavan, and H. Haddad, "On Novelty Evaluation of Potentially Useful Patterns," in (Eds. S. F. Crone, S. Lessmann & R. Stahlbock), *Proceedings of the 2006 International Conference on Data Mining*, Las Vegas, NV, June 2006, pp. 211-217.
- Y. Xie, T. Johnsten, V. V. Raghavan and K. Ramachandran, On Discovering "Potentially Useful" Patters from Databases, (Eds. Y.-Q. Zhang, T. Y. Lin), *Proceedings of the 2006 IEEE International Conference on Granular Computing*, Atlanta, May 2006, pp. 494-497.
- D. Mundluru, Z. Wu, V. Raghavan, W. Meng and H. Zhao, "Automatically Extracting Subsequent Response Pages from Web Search Sources," in (Eds. D. Caragea, V. Honavar, I. Muslea, R. Ramakrishna), *Proc. 5th IEEE Workshop on Knowledge Acquisition from Distributed Autonomous, Semantically Heterogeneous Data and Knowledge Sources*, Houston, TX, Nov. 2005, pp. 25-34.

- E. Diaz, A. De and V. Raghavan, "A Comprehensive OWA-based Framework for Result Merging in Metasearch," in (Eds. D. Slezak, J.-T. Yao, J. F. Peters, W. Ziarko, X. Hu), *Proc. 10th International Conf. on Rough Sets, Fuzzy Sets and Granular Computing (RSFDGRC 2005, Part II, Regina, Canada, Sept. 2005*, pp. 193-201.
- K. Ramachandran, B. Shah and V. Raghavan, "Access Pattern-Based Dynamic Pre-fetching of Views in an OLAP System," in *International Conference on Enterprise Information Systems*, May 2005.
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- H. Zhao, W. Meng, Z. Zu, V. Raghavan and C. Yu, "Fully Automatic Wrapper Generation for Search Engines," in (Eds. A. Ellis, T. Hagino, F. Douglis, P. Raghavan), *Proc. 14th International World Wide Web Conf.*, Chiba, Japan, May 2005, pp. 66-75.
- Y. Xie, D. Mundluru and V. Raghavan, "Incorporating Agent-based Neural Network Model for Adaptive Meta Search," in (Eds. V. A. Clincy, B. Harbort), *Proc. 43rd ACM Southeast Conf. (ACMSE 2005)*, Kennesaw, GA, March 2005, Vol. 1, pp. 53-58.
- A. Doloc-Mihu, V. Raghavan, S. Karnatapu and C. H. Chu, "Interface for Visualization of Image Database in Adaptive Image Retrieval Systems," in (Eds. R. Erbacher, J. Roberts, M. Groehn, K. Boerner), *Proceedings of IS&T/SPIE 17th Annual Symposium on Electronic Imaging Science and Technology*, Vol. 5669, *Visualization and Data Analysis 2005*, San Jose, CA, Jan. 2005, pp. 106.
- S. Karnatapu, K. Ramachandran, Z. Wu, B. Shah, V. Raghavan and R. Benton, "Estimating Size of Search Engines in Uncooperative Environment," in *International Workshop on Web-based Support Systems (WI-WSS'04)*, Beijing, China, Sep. 2004.
- Z. Wu, D. Mundluru and V. Raghavan, "Automatically Detecting Boolean Operations Supported by Search Engines," in *International Workshop on Web-based Support Systems (WI-WSS'04)*, Beijing, China, Sep. 2004.
- R. Mehra, S. K. Gandham, Z. Wu and V. Raghavan, "Configuring Java-based Web Application Development Environment for an Academic Setting," in *International Workshop on Web-based Support Systems (WI-WSS'04)*, Beijing, China, Sep. 2004.
- E. Diaz, A. De and V. Raghavan, "On Selective Result Merging in a Metasearch," in *International Workshop on Web-based Support Systems (WI-WSS'04)*, Beijing, China, Sep. 2004.
- A. Doloc-Mihu, V. Raghavan and P. Bollmann-Sdorra, "Integration of Multiple Feature Types with Adaptive Retrieval in Vector Space Model," in *ACM SIGIR Workshop on Mathematical/Formal Methods in Information Retrieval*, U.K., July 2004.
- B. Shah, K. Ramachandran and V. Raghavan, "Storage Estimation of Multidimensional Aggregates in a Data Warehouse Environment," in *World Multi-Conference on Systemics, Cybernetics and Informatics*, Orlando, FL, July 2004.

Demo and Industrial Track Papers

- Y. Lu, Z. Wu, H. Zhao, W. Meng, K.-L. Liu, V. V. Raghavan and C. Yu. "MySearchView: A Customized Metasearch Engine Generator," *26th ACM SIGMOD International Conference on Management of Data (ACM SIGMOD 2007)*, *Demo paper*, Beijing, China, June 2007, pp. 1113-1115.
- K.-L. Liu, W. Meng, J. Qiu, C. Yu, V. V. Raghavan, Z. Wu, Y. Lu, H. He and H. Zhao. "AllInOneNews: Development and Evaluation of a Large-Scale News Metasearch Engine," *26th ACM SIGMOD International Conference on Management of Data (ACM SIGMOD 2007)*, *Industrial track*, Beijing, China, June 2007, pp. 1017-1028.

