

Min Song, Ph.D.

Phone: 973-596-5291

min.song@njit.edu

University Address	Permanent Address
Department of Information Systems New Jersey Institute of Technology Email) min.song@njit.edu	29 Westbury Dr. Cherry Hill, NJ, 08003 Tel) 856-489-0960

RESEARCH INTERESTS

Text Mining, Information Retrieval, Information Visualization, Knowledge Management, Web Mining, Digital Libraries, and Bioinformatics

EDUCATION

PhD, College of Information Science & Technology, Drexel University,
Philadelphia, PA, Spring 2005

Dissertation Title: Robust Knowledge Extraction over Large Text Collections

M.S., School of Library and Information Science, Indiana University, Bloomington,
Indiana, Spring 1996

B.A., School of Library and Information Science, Yonsei University, Seoul, Korea,
Spring 1992

HONORS AND AWARDS

2010 NJLA CUS Technology Innovation Award Nominee

2009 NJIT Teaching Award Nominee by IS

2009 Outstanding Service Award by CIKM

2008 NYAS Blavatnik Award Nominee by NJIT

2008 Microsoft Research New Faculty Nominee by NJIT

2005 Beta Phi Mu Minority Doctoral Student Scholarship Award

2005 Poster Competition Honorable Mention Award in open division, 2005 GBPA
Annual Retreat.

Title: *Biomedical Knowledge Extraction*

2005 **Best Dissertation Award**, Drexel University
 2005 Honorable Mentions at 2005 Drexel Research Day, Drexel University
 Title: *Robust Knowledge Extraction over Large Text Collections*
 2004 **Best Paper award** at IEEE Symposium on Computational Intelligence in
 Bioinformatics and Computational Biology
 Title: *Extracting and Mining Protein-protein interaction Network from Biomedical
 Literature*
 2004 **Nominated for a Best Paper award** at IEEE/ACM Web Intelligence Conference
 Title: *Ontology-based Scalable and Portable Information Extraction System to Extract
 Biological Knowledge from Huge Collection of Biomedical Web Documents*
 2004 **Dean's Award** at 2004 Drexel Research Day, Drexel University
 Title: *Applying Mixture Hidden Markov Models to extracting protein-protein
 interactions in large unstructured natural language text collections*
 2003 **Dean's Award** at 2003 Drexel Research Day, Drexel University
 Title: *CS-Engine: an intelligent cross search engine for multiple heterogeneous
 databases*
 2001 **Current Kudos**, Institute for Scientific Information
 1999 **Current Kudos**, Institute for Scientific Information
 1998 **Clayton A. Shepherd Scholarship**, Indiana University
 1998 **Summer H. W. Wilson Fellowship**, Indiana University
 1996 Fall-1997 Spring **Fellowships of SLIS**, Indiana University

PROFESSIONAL EXPERIENCE

June 2006 - Present	Assistant professor, College of Computing Sciences, New Jersey Institute of Technology
August 2005 – May 2006	Adjunct Faculty, Department of Computer & Information Sciences, Temple University
January 2005 – May 2006	Senior Software Engineer, Middleware Server Technologies, Thomson Scientific
March 2003 – December 2004	Software Engineer II, Middleware Server Technologies, Thomson Scientific
January 2001 – March 2003	Software Engineer II, Knowledge Management, Thomson Scientific

June 2006 - Present	Assistant professor, College of Computing Sciences, New Jersey Institute of Technology
August 2005 – May 2006	Adjunct Faculty, Department of Computer & Information Sciences, Temple University
February 1999 – January 2001	System Analyst, User Interface Design and Documentation, Thomson Scientific (formally called Institute for Scientific Information)

TEACHING EXPERIENCE

Spring 2010	Enterprise Database Management, NJIT
Fall 2009	Web Mining, NJIT
Spring 2009	Advanced Information Systems, NJIT
Fall 2008	Web Mining, NJIT
Spring 2008	Advanced System Design and Analysis, NJIT
Fall 2007	Web Services and Authentication, NJIT
Spring 2007	Database Management System, NJIT
Fall 2006	System Design and Analysis, NJIT
Spring 2006	Information Retrieval Systems, Drexel University
Fall 2005	Advanced Topics in Database Systems, Temple University
Summer 2005	Object-oriented Programming for Information Systems, Drexel University
Summer 2002	Workshop on Web Services: Concepts and Techniques, Drexel University
Spring 1998	Computer-based Information Tools (L401), Indiana University
Fall 1997	User Needs: Theories and Practices (L503), Indiana University

PUBLICATIONS

Book

Song, M. and Wu, Y-F. (2008). *Handbook of Research on Text and Web Mining Technologies*, IDEA Group Publishing published in September 2008.

Book Chapter:

1. Song, M. and Song, I.-Y. (2007) *Automatic Query Expansion with Keyphrases and POS Phrase Categorization for Effective Biomedical Text Mining*. In Book: *Knowledge Discovery in Bioinformatics: Techniques, Methods, and Applications*, 197-208, Wiley Publishing.
2. Manchester, M. and Song, M. (2007) Text Categorization, in: *Encyclopedia of Data Warehousing and Mining*, 2nd Edition.
3. Maceli, M. and Song, M. (2007) Deep Web Mining through Web Services, in: *Encyclopedia of Data Warehousing and Mining*, 2nd Edition.
4. Song, M. and Hu, X., and Song, I.-Y. (2005) Information Extraction in Biomedical Literature. To be published in: *Encyclopedia of Data Warehousing and Data Mining*.

Journal Papers (Published and Accepted)

1. Rudniy, A., Song, M., Geller, J. (2010) Detecting Duplicate Biological Entities Using Shortest Path Edit Distance, to be published in 2010, *International Journal of Data Mining and Bioinformatics*.
2. Ijaz, A.Z., Song, M. and Lee, D. (2010) MKEM: a Multi-level Knowledge Emergence Model for Mining Undiscovered Public Knowledge, *BMC Bioinformatics*, 11(Suppl 2):S3 doi:10.1186/1471-2105-11-S2-S3
3. Song, M. and Rudniy, A. (2010) Detecting Duplicate Biological Entities using Markov Random Field-based Edit Distance, to be published in 2010 *Knowledge and Information Systems*.
4. Song, M. and Liu, H. (2010) AbbrevExtractor: a Robust Extraction Technique for Biomedical Literature, to be published in 2009, *International Journal of Functional Informatics and Personalised Medicine*, vol. 3, no. 2.
5. Song, M. Hu, X., Koppel, E. Yoo, I.Y. (2009) A Dynamic and Semantically-aware Technique for Document Clustering in Biomedical Literature, (Accepted) *International Journal of Data Warehousing and Mining (IJDWM)*, vol. 5, no. 4.
6. Duan, W., Song, M., Yates, A. (2009). Fast Max-margin Clustering for Unsupervised Word Sense Disambiguation in Biomedical Texts. *BMC Bioinformatics*.
7. Yoo, I. and Song, M. (2008) Biomedical Ontologies and Text Mining for Biomedicine and Healthcare, *Journal of Computing Science and Engineering*

(*JCSE*), June

8. Torii, M., Hu, Z., Song, M., Wu, C., Hongfang Liu, H., (2007) A Comparison Study on Algorithms of Detecting Long Form for Short Forms in Biomedical Text, *BMC Bioinformatics*, Winter.
9. Song, M, Song, I-Y., Hu, X., Allen R. (2007) "Integration of Association Rules and Ontology for Semantic-based Query Expansion", *Data and Knowledge Engineering*, 63(1): 63-75.
10. Song, M., Song, I-Y., Hu, X., and Allen, R.B. (2005). KXtractor: an Effective Biomedical Information Extraction Technique Based on Mixture Hidden Markov Models, *LNCS Transactions on Computational Systems Biology*, 2: 68-81.
11. Hu, X., Lin, T.Y., Song, I-Y., Lin, X., Yoo, I., and Song, M. (2005) A Semi-supervised Efficient Learning Approach to Extract Biological Relationships from Web-based Biomedical Digital Library, *International Journal of Web Intelligence and Agent Systems*.
12. Song, M., Song, I-Y, and Chen, P.P. (2004). Design and Development of a Cross Search Engine for Multiple Heterogeneous Databases Using UML and Design Patterns, *Information Systems Frontiers: A Journal of Research and Innovation*, 6(1): 77-90.
13. Song, M. (2000). Visualization in Information Retrieval: A Three-Level Analysis, *Journal of Information Science*, 26(1): 3-19.
14. Dillon, A. and Song, M. (1997). An Empirical Comparison of the Usability for Novice and Expert Searchers of a Textual and a Graphical Interface to an Art-resource Database, *Journal of Digital Information*, 1, 12-20.
15. Beebe, C., Nedell, E., Song, M., Sullivan, J., Overfelt, K., Schatz, J., Davenport, E. (1994). New Technology and Publishing: Six Case Studies in Search of a Theory, *Aslib Proceedings*, 46(9): 217-224.

Conference Papers (Published and Accepted)

1. Song, M., Yu, W. J., and Han, W. S. (2010) Combining Active Learning and Semi-supervised Learning Techniques to Extract Protein Interaction Sentences, *BIOKDD 10, in conjunction with KDD 2010*, Washington, D.C. July 25.
2. Rudniy, A., Song, M., and Geller, J. (2010) Shortest Path Edit Distance for Detecting Duplicate Biological Entities. *ACM International Conference on Bioinformatics and Computational Biology*
3. Ho, S. M., Song, M., Bieber, M., (2010) IntegraL: The Effectiveness of a Link-based Federated Search Infrastructure, *iConference 2010*.

4. Xiong, W., Song, M., Watrous-deversterre, L. (2010) A Quantitative Assessment of SENSATIONAL with an Exploration of Its Applications, FLAIRS 2010.
5. Song, M. and Murillo, J. (2009) An Outcome Discovery System to Determine Mortality Factors in Primary Care Facilities, DTMBIO 09.
6. Song, M., Ruecker, S., and Youngman, P. (2009) Indications of Emotional Connection: Epistolary Text Mining for Intimate Language, BookOnline 09, October 2, Corfu, Greece
7. Song, M., Ho, S.M., Bieber, M., Koppel, E., Hamidullah, V., and Bokota, P. (2009) A scalable Digital Library Infrastructure Expands Search and Beyond (2009) Ind, BookOnline 09, October 2, Corfu, Greece
8. Qi, T., Zhang, Y., and Song, M. (2009). Text Mining for Bioinformatics: State of the Art Review, 2009 the 2nd IEEE International Conference on Computer Science and Information Technology (ICCSIT 2009).
9. Qi, T., Yagci, A., and Song, M. (2009). Extraction of Key-phrases from Biomedical Full-text with Supervised Learning Techniques, 15th Americas Conference on Information Systems.
10. Bleik, S., Smalter, A., Song, M., Huan, J. and Lushington, G. (2009) CGM: A Biomedical Text Categorization Approach Using Concept Graph Mining, Workshop of Applications of Machine Learning in Bioinformatics in conjunction with BIBM 09.
11. Song, M. and Bieber, M. (2008). Integral: Lightweight Link-based Integration of Heterogeneous Digital Library Collections and Services in the Deep Web, The Semantic Web meets the Deep Web workshop, in conjunction with IEEE Joint Conference on E-Commerce Technology and Enterprise Computing, E-Commerce and E-Services 2008. 20-26
12. Song, M., Hu, X., Koppel, E. Yoo, I.Y. Document Clustering by Semantic Smoothing and Dynamic Growing Cell Structure (DynGCS) for Biomedical Literature, 10th International Conference on Data Warehousing and Knowledge Discovery (DaWaK 2008), Turin, Italy, 217-226
13. Song, M. and Rudniy, A. (2008) Markov Random Field-based Edit Distance for Entity Matching, Biomedical Literature, International Conference on Bioinformatics and Biomedicine, 2008, 457-460.
14. Song, M. and Chang, P. (2008) Automatic Extraction of Abbreviation for Emergency Management Websites, International Community on Information Systems for Crisis Response and Management, Washington, DC, USA, May 4-7, 2008.

15. Song, M. and Yoo, I.Y. (2007) A Hybrid Abbreviation Extraction Technique for Biomedical Literature, *IEEE International Conference on Bioinformatics and Biomedicine (BIBM)*. November 2-4, 2007.
16. Song, M., Song, I-Y, Lee, K.J., and Bieber M. (2006) Automatic Extraction of Creating a Lexical Repository of Abbreviations in the Biomedical Literature, *8th International Conference on Data Warehousing and Knowledge Discovery (DaWaK 2006)*.
17. Song, M., Song, I.-Y., Allen, R., and Obradovic, Z. (2006) Keyphrase Extraction-Based Query Expansion in Digital Libraries, *Joint Conference on Digital Libraries*, Chapel Hill, NC, June 11-15.
18. Zhu, W., Song, M., and Allen R. (2005). TREC 2005 Enterprise Track Results from Drexel, *14th Text REtrieval Conference (TREC 2005)*, National Institute of Standards and Technology (NIST). November 15-18, Gaithersburg, Maryland USA, 415-420.
19. Hu X., Yoo I., Song M., Y. Zhang, I-Y Song, Mining Undiscovered Public Knowledge from Complementary and Non-interactive Biomedical Literature through Semantic Pruning, *ACM Fourteen Conference on Information and Knowledge Management (ACM CIKM 2005)*, 31st October - 5th November, 2005 Bremen, Germany.
20. Song, M., Song, I-Y., Lee, K.J. (2005) Automatic Unsupervised Keyphrase-based Query Expansion for Biomedical Domain, *International Conference on Knowledge Management*, Westin Charlotte, North Carolina on October 27-28.
21. Song, M, Song, I-Y., Hu, X., Allen R. (2005) Semantic Query Expansion Combining Association Rules with Ontologies and Information Retrieval Techniques, *Data Warehousing and Knowledge Discovery (DaWak 2005)*.
22. Song, M., Song, I.-Y., Hu, X., and Allen, R.B. (2005). Integrating Text Chunking with Mixture Hidden Markov Models for Effective Biomedical Information Extraction, *International Workshop on Bioinformatics Research and Applications*, Emory University, Atlanta, USA, May 22-25.
23. Song, M., Song, I.-Y., Hu, X., and Allen, R.B. (2005). DocSpotter: an Automatic Unsupervised Querying Algorithm for Efficient Information Extraction in Biomedical Domain, *9th Pacific Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2005)*, Vietnam, May 18-20.
24. Hu, X., Yoo, I., Song, I.-Y., Song, M, Han, J., and Lechner, M. (2004). Extracting and Mining Protein-protein interaction Network from Biomedical Literature, *2004 IEEE Symposium on Computational Intelligence in Bioinformatics and*

Computational Biology. (Best Paper award).

25. Hu X., Lin T.Y, Song I-Y. Lin X. Yoo, I., Lechner M., and Song, M. (2004). *Ontology-based Scalable and Portable Information Extraction System to Extract Biological Knowledge from Huge Collection of Biomedical Web Documents*, 2004 IEEE/ACM Web Intelligence Conference, 77-83. **(Nominated for a Best Paper award).**
26. Song, M, Song, I.-Y., and Hu, X. (2004). Designing and Developing Flexible Keyphrase Extraction System with Unified Modeling Language (UML), *ASIS&T 2004 Annual Meeting; "Managing and Enhancing Information: Cultures and Conflicts*, Providence, Rhode Island November 13 – 18, 367-372.
27. Song, M., Song, I.-Y., and Hu, X. (2004). An Efficient Keyphrase Extraction System Using Data Mining and Natural Language Processing Techniques, *First International Workshop on Semantic Web Mining and Reasoning (SWMR 2004) In conjunction with the 2004 IEEE/WCI/ACM International Conference on Web Intelligence*. Sept. 20-24, 2004, Beijing, China.
28. Song, M, Song, I.-Y., and Hu, X. (2003). KPSpotter: A Flexible Information Gain-based Keyphrase Extraction System, *Fifth International Workshop on Web Information and Data Management (WIDM'03), In Conjunction with the 12th International Conference on Information and Knowledge Management (CIKM 2003)*, November 7-8, 2003.
29. Song, M. and Song, I.-Y. (2003). Developing a Cross Search Engine for Multiple Heterogeneous Databases, *2003 Information Resources Management Association (IRMA) International Conference*, May 18-21, 2003, Philadelphia, USA.
30. Song, M. and Galardi, P. (2001). Semantic Relationships between Highly Cited Articles and Citing Articles in Information Retrieval, *Proceedings of the 64th ASIST Annual Meeting*, 38: 171-181.
31. Song, M. and Song, I.-Y. (2001). A Case Study for Web-based Data Delivery E-commerce Design, accepted to *Informing Science Conference 01*, June 19-22 Crakow, Poland.
32. Song, M. (1998). BiblioMapper: A Cluster-based Information Visualization Technique. *IEEE Symposium on Information Visualization (InfoVis 1998), Sponsored by the IEEE Computer Society Technical Committee on Computer Graphics*, October 19-20, 1998 Research Triangle Park, NC, 130-136.
33. Song, M. (1998). Cluster-based and Association-based Visualization Systems as Information Exploration Tools, In: *the 9th ASIS SIG/CR Classification Research Workshop: An interdisciplinary meeting*. Pittsburgh, PA, October 25.

34. Song, M (1998). Can Visualizing Document Space Improve User's Information Foraging?, *1998 Annual Meeting of American Society for Information Science*, Pittsburgh, PA October 26-29, 118-129.
35. Song, M and Gillespie, T. (1997). BiblioMapper: Visualizing a Database of Technical Reports. *Poster Session: Abridged Proceedings In: HCI International '97: 7th International Conference on Human-Computer Interaction jointly with 13th Symposium on Human Interface (Japan)*. August 24-29, San Francisco, California, 87.
36. Song, M. (1997). Visualization for Complex Large-Scale Systems: Issues and Research Agenda, In: *the proceedings of AIS 97: Training and Use of Emerging Technologies for Information System Track*, August 15-17, Indianapolis, IN, 543-546.

Presentations

1. Ho, S.M., Song, M., Bieber, M. (2010). IntegraL connects data, users and scientists. *Proceedings of 36th Annual Conference of International Association for Social Science Information Services & Technology (IASSIST 2010)*, June 1-4, 2010.
2. Song, M. (2008) A Markov Random Field-based Edit Distance (MRFED) Algorithm for Gene Synonym Matching, *Emerging Information and Technology – Bioinformatics (EITC-Bio) 2008*, Princeton, NJ.
3. Song, M, Bieber, M., Kopel, E., Lori. (2008) IntegraL: Lightweight Link-based Integration of Heterogeneous Digital Library Collections, *NSDL*, Washington, D.C., Oct.
4. Song, M (2005) Robust Knowledge Extraction over Large Biomedical Text Collections, *Greater Philadelphia Bioinformatics Alliance*, October 14, 2005, Penn State Great Valley, Malvern, PA. (**Poster Competition Honorable Mention award in Open Division.**)
5. Song, M. and Chen, C. (2003). Investigation of Power Law Distribution of Citation Data in the field of Medicine, *9th International Conference Scientometrics and Informetrics*, China
6. Song, M. and Lin, X. (2002), Interactive Visualization System with Multidimensional Scaling, *American Society for Information Science and Technology ASIST 2002 Annual Meeting November 18-21, 2002 * Wyndham Franklin Plaza Hotel * Philadelphia, PA*, 39: 562-563.
7. Song, M. and Song, I.-Y. (2002). Developing a Cross-Search Component for a Web Information Retrieval System Using UML and Design Patterns, *1st*

International Semantic Web Conference (ISWC2002) June 9-12th, 2002 Sardinia, Italy .

8. Song, M. (1997). Can Visualizing Document Space Improve User's Information Foraging?: Research in Progress. *Connections 97: The Third Great Lakes Information Science Conference*, October 24-25, pp. 17 1997

Non-refereed journal

1. Song, M. and Obradovic, Z. (2007) Report on ACM Text Mining in Bioinformatics (TMBIO 2006), *SIGIR Forum*, vol 41, issue 1.

Papers Submitted for Publication

Journal

1. Song, M. and Song, I.-Y. TAKES: Two-step Approach for Knowledge Extraction in Biomedical Digital Libraries, *Information Processing and Management*
2. Wu, Y-F., Srinivasan, A., Mahindru, R., and Song, M. Automatic Level-of-Evidence Classification on PubMed Documents, *Journal of Biomedical Informatics*.
3. Qi, T., Song, M., Yoon, S. J. Combining Supervised Learning Techniques to Keyphrase Extraction for Biomedical Full-text, *International Journal of Intelligent Information Technologies (IJIT)*
4. Zhang, L., Bieber, M., Song, M., Oria, V., and Millard, D. Supplementing Just-in-Time Hypermedia Functionality for Virtual Documents, *International Journal on Digital Libraries*.
5. Said, B., Wei, X., Wang, Y., and Song, M. (2010) Ontology-based Biomedical Concept Extraction Using Sub-graph Clustering, *Engineering Applications of AI (EAAI)*

Conference

1. Rudniy, A., Geller, J., and Song, M. (2010) Shortest Path Edit Distance for Enhancing UMLS Integration and Audit, *AMIA*

Book Chapters

1. A Comparative Study of an Unsupervised Word Sense Disambiguation Approach, Xiong, W., Song, M., Watrous-deVersterre, L. *Applied Natural Language Processing: Identification, Investigation, Resolution*, by IGI Global

2. Song, M. (2009). BioKeySpotter: an Unsupervised Keyphrase Extraction Technique in the Biomedical Full-text Collection, DATA MINING: Foundations and Intelligent Paradigms, in the series 'Intelligent Systems Reference Library'.

GRANT EXPERIENCE

Awarded NSF Grants

1. PI - Title: QIC: Query in Context for Educational Collections, Amount: \$149,985.00, to run through 09/11.
2. Co-PI - Title: Integral: Expanding the NSDL Reach to Traditional Libraries, Amount: \$849,997, to run through 12/08.

Awarded Institute of Museum and Library Services (IMLS) Grant

1. Co-PI - Title: "IntLib: Integrating Library Collections and Services," Amount: \$500,000, to run through 12/08.

NSF Panels

1. NSF Panel for CRI
2. NSF Panel for IIS Core Program
3. NSF Panel for CISE Career Program
4. NSF Panel for HCC Core Program

CONFERENCE PROGRAM COMMITTEE SERVICE

Organizing Conference

1. Co-travel award chair: The Nineteenth Conference on Information and Knowledge Management, Toronto, Canada, 2010
2. Co-program chair: Fourth International Workshop in Data and Text Mining in Bioinformatics (DTMBIO 2010), in Toronto, Canada, 2010
3. Workshop chair: The Eighteenth Conference on Information and Knowledge Management, in Hong Kong, China, 2009
4. Co-program chair: Third International Workshop in Data and Text Mining in Bioinformatics (DTMBIO 2009), in Hong Kong, China, 2009
5. Co-chair: Second International Workshop in Data and Text Mining in Bioinformatics (DTMBIO 2008), in Napa Valley, CA, USA
6. Co-chair: International Workshop on Biomedical and Health Informatics in

- conjunction with the IEEE International Conference on Bioinformatics and Biomedicine 2008 (BIBM 2008), Philadelphia, PA, USA, November 5-7, 2008
7. Registration chair: IEEE International Conference on Bioinformatics and Biomedicine 2008 (BIBM 2008), Philadelphia, PA, USA, November 5-7, 2008
 8. Co-chair: International Workshop on Knowledge Discovery and Management in Health Informatics in conjunction with the IEEE International Conference on Bioinformatics and Biomedicine, November 2-4 2007, Silicon Valley, USA
 9. Local chair of 2007 IEEE/INFORMS International Conference on Service Operations and Logistics, and Informatics (SOLI)
 10. Co-chair of International Workshop in Text Mining in Bioinformatics (TMBIO 2006), in Washington D.C.

Conference Program Committee

1. The Nineteenth Conference on Information and Knowledge Management, Toronto, Canada, 2010
2. ICDM International Workshop on Mining Multiple Information Sources (MMIS)
3. Workshop on Language Technology applied to biomedical and health documents (BioSEPLN 2010)
4. The Joint Conference of 23rd International Conference on the Computer Processing of Oriental Languages (ICCPOL 2010)
5. The 2010 IEEE International Conference on Granular Computing
6. The International workshop on Data Mining in Bioinformatics (BIOKDD'10)
7. The 10th IEEE International Conference on Data Mining (ICDM 2010)
8. The 9th IEEE International Conference on Data Mining (ICDM 2009)
9. The 2009 IEEE International Conference on Granular Computing
10. The 7th ACS/IEEE International Conference on Computer Systems and Applications (AICCSA-2009)
11. The 2008 IEEE International Symposium on Data Mining and Information Retrieval (IEEE DMIR-08)
12. 10th International Conference on Data Warehousing and Knowledge Discovery (DaWaK 2008) Turin, Italy, September 2-5, 2008
13. IEEE ICDM Workshop on Mining and Management of Biological Data in conjunction with IEEE International Conference of Data Mining (ICDM 07), October 28, 2007, Omaha, NE, USA.
14. The 2007 IEEE International Symposium on Data Mining and Information Retrieval (IEEE DMIR-07) in conjunction with the IEEE 21st International Conference on

- Advanced Information Networking and Applications (AINA-07), May 21-23, 2007
Sheraton Fallsview Hotel, Niagara Falls, Ontario, Canada
15. 2007 IEEE International Conference on Bioinformatics and Biomedicine (BIBM),
November 2-4, 2007, San Jose, California, USA
 16. GrC 2006 IEEE International Conference On Granular Computing, Georgia State
University, Atlanta, USA, May 10-12, 2006, Sponsored by the IEEE Computational
Intelligence Society
 17. GrC 2005 IEEE International Conference On Granular Computing, Beijing, China,
July 25-27, 2005.
 18. The 2004 International Conference on Computer and Information Technology
Wuhan, China, 14-16 September 2004.
 19. First International Workshop on Semantic Web Mining and Reasoning (SWMR
2004), in conjunction with the 2004 IEEE/WCI/ACM International Conference on
Web Intelligence.

**EXTERNAL REVIEWER FOR JOURNALS, INTERNATIONAL
CONFERENCES AND FUNDING AGENCY**

1. 2010 Science & Engineering Research Council (SERC), part of the Agency for
Science, Research & Technology (A*STAR), Science & Engineering Research
Council (SERC) in Singapore.
2. The 14th World Multi-Conference on Systemics, Cybernetics and Informatics:
WMSCI 2010
3. Journal of Advances in Bioinformatics, 2010
4. The Eighteenth Conference on Information and Knowledge Management, 2009
5. The 13th World Multi-Conference on Systemics, Cybernetics and Informatics:
WMSCI 2009
6. 2007 Science & Engineering Research Council (SERC), part of the Agency for
Science, Research & Technology (A*STAR), Science & Engineering Research
Council (SERC) in Singapore.
7. The 24rd International Conference on Conceptual Modeling (ER2005)
8. The Tenth International Conference on Rough Sets, Fuzzy Sets, Data Mining, and
Granular Computing (RSFDGrC 2005)
9. The 7th Data Warehousing and Knowledge Discovery (DAWAK) 2005
10. The First International Workshop on Digital Government: Systems and
Technologies (DGOV) 2004

11. The 16th International Conference o Advanced Information Systems Engineering (CaiSE) 2004
12. The 23rd International Conference on Conceptual Modeling (ER2004)
13. The 4th International Conference on Computer and Information Technology (CIT) 2004
14. The First International Workshop on Semantic Web Mining and Reasoning (SWMR) 2004
15. The 6th Data Warehousing and Knowledge Discovery (DAWAK) 2004
16. 4thInternational Conference on Web Information Systems Engineering (WISE) 2003
17. 22nd International Conference on Conceptual Modeling (ER 2003)
18. National Science Foundation Information Technology Research (NSF ITR) 2004

INVITED TALK

1. Title: Adaptive Text Mining for Large Unstructured Text Collection, 12/21/2006, at Georgetown University. I was invited by Department of Biostatistics, Bioinformatics, and Biomathematics at Georgetown University Medical Center.
2. Title: Sensational: An Unsupervised Word Sense Disambiguation Technique for Information Retrieval, 05/26/09, at Seoul National University
3. Title: Sensational: An Unsupervised Word Sense Disambiguation Technique for Information Retrieval, 05/29/09, at Yonsei University
4. Title: Sensational: An Unsupervised Word Sense Disambiguation Technique for Information Retrieval, 06/01/09, at KyungPook National University
5. Title: Sensational: An Unsupervised Word Sense Disambiguation Technique for Information Retrieval, 06/18/09, at Korea University
6. Title: Query In Context (QIC): Incorporating Context into Search, 04/01/2010, at Drexel University

PPROFESSIONAL MEMBERSHIPS

1. American Society for Information Science & Technology (ASIST)
2. Association for Computing Machinery (ACM)
3. Institute of Electrical and Electronics Engineers (IEEE)

EDITORIAL ACTIVITIES

1. Editorial board member - International Journal of Data Mining and Bioinformatics
2. Editorial board member - Online Journal of Bioinformatics

3. Editorial board member - International Journal of Computational Models and Algorithms in Medicine
4. Co-guest editor of a special issue on Text Mining in Bioinformatics – BMC Bioinformatics, 2007
5. Co-guest editor of a special issue on BMC Medical Informatics and Decision Making, 2009