Curriculum Vitae
O.R. Zaïane, Ph.D.

Department of Computing Science, University of Alberta,
Edmonton, Alberta, Canada, T6G 2E8

Tel: 1-(780) 492-2860   -   Fax: 1-(780) 492-1071
Zaïane@cs.ualberta.ca   -   http://www.cs.ualberta.ca/~Zaïane/

Table of Contents   Version: December 2009

1. Education and Work Experience

1.1 Education

- Ph.D. in Computer Science, Simon Fraser University, Burnaby, British Columbia, Canada, March 1999. Topic: *Web Mining and Multimedia Mining*. Supervisor: Dr. J. Han.
  Title: **Resource and Knowledge Discovery from the Internet and Multimedia Repositories**
- M.Sc. in Computer Science, Laval University, Sainte Foy, Quebec, Canada, April 1992.
  Topic: *Distributed and Mobile databases on smartcards*. Supervisor: A. Gamache.
  Title: **Logical access and small sized data compression in portable medical records managed by smartcards**
- M.Sc. (equivalent) in Electronics, University Paris XI, Paris, France, September 1989.
  Topic: *Natural Language Processing*. Supervisor: Dr. F. Debili.
  Title: **Morphological Analysis of Written Arabic**
- B.Sc. (equivalent) in Computer Science, University of Tunis, Tunis, Tunisia, June 1988.
  Internship at the Centre National de la Recherche Scientifique (CNRS), Paris, France.

1.2 Work Experience

- Promoted to Full Professor starting from July 2009
- 2005 to present: Associate Professor, Computing Science, University of Alberta, Edmonton, Canada
- 2009 to present: Scientific Director, Alberta Ingenuity Centre for Machine Learning (AICML)
- 2006 (January – April): Distinguished Professor, School of Electrical and Electronics Engineering, Chung-Ang University, Seoul, Korea.
- 2005 (July-December): Visiting Professor, School of Information Technology, University of Sydney, Sydney, Australia
- 1999 to 2005: Assistant Professor, Computing Science, University of Alberta, Edmonton, Canada
- 2003 (October-November): Visiting Professor, Faculty of Information Technology, University of Technology Sydney, Sydney, Australia
- 2000 to present: Technical Advisory Committee member, Cel Corporation, Edmonton, Canada
- 1995 to present: Manager / Owner, ROMZ Consulting
- 1998 to 1998: Sessional Instructor, Computing Science, Simon Fraser University, BC, Canada
- 1996 to 1997: Research Associate, Computing Science, Simon Fraser University, BC, Canada
- 1993 to 1995: Research Assistant, Computing Science, Simon Fraser University, BC, Canada
- 1993 to 1995: Teaching Assistant, Computing Science, Simon Fraser University, BC, Canada
- 1992 to 1993: Research Associate, Computing Science, Laval University, Quebec, Canada
- 1990 to 1992: Research Assistant, Computing Science, Laval University, Quebec, Canada

- 1990 to 1990: Teaching Assistant, Computing Science, Laval University, Quebec, Canada
- 1985 to 1989: Software Engineer, AII Informatics, Tunisia
- 1988 to 1989: Research Assistant, Centre National de la Recherche Scientifique - URA 962, France
- 1987 to 1987: Research Assistant, Computing Science, Laval University, Quebec, Canada
- 1985 to 1987: Teaching Instructor, Computing Science, Institut Supérieur de Gestion - University of Tunis, Tunisia

2. Awards, Honours and Patents

2.1 Awards and Honors

- IEEE - ICDM Outstanding Service Award 2009.
- Killam Annual Professorship for 2009-2010
- McCalla Research Professorship for 2008-2009.
- Listed in the International Who's Who of Professionals, 2004
- Canadian Advanced Technology Alliance (CATA), Computer Science and Software Engineering Award, June 1999. (One award is given each year in Computer Science and Software Engineering in Canada.)
- British Columbia Advanced Systems Institute, ASI Exchange Communication Award, March 1999
- Simon Fraser University Centre for System Science, Excellent Poster Award, March 1999
- Three Ebco/Eppich Scholarships in Expert Systems, January 1999
- Simon Fraser University Graduate Fellowship: January 1998 and September 1998
- Intelligent Database Systems Laboratory (SFU) Award for R&D Achievement in Data Mining: October 1996, September 1998 and November 1998
- Simon Fraser University Centre for System Science, Excellent Poster Award, March 1997
- British Columbia Advanced Systems Institute Special Graduate Research Fellowship: January 1994
- Scholarship Fond pour la Formation de Chercheurs et l'Aide à la Recherche: 1993-1996
- Tunisian National Merit Scholarship with Canadian International Development Agency funds: 1990-1992
- Merit Scholarship from the Centre National des Œuvres Universitaires et Scolaires, France: 1988-1989

2.2 Patents

- **Method of Producing Web Search Result**, O.R. Zaiane, J. Chen and R. Goebel, Provisional Patent Application serial number 61/120,568

3. Major Research and Research Funding

3.1 Research Interests

Topics: Database Management Systems, Data Mining, Web Mining, Content-Based Information Retrieval, Multimedia Mining, Parallel Data Mining, e-Learning, Health Informatics.

Current research pertains to knowledge discovery from large databases and information retrieval. In particular, data mining from the Internet and data mining from multimedia repositories. Research projects include Web access log mining for user web navigation behaviour understanding, user profiling, and adaptive web site construction in particular in the context of e-learning. Other research projects relate to data clustering analysis, digital document categorization, parallel data mining algorithms, database security issues in data mining, and data visualization in immersive environments. A new focus is the application of data mining in health informatics.

3.2 Research Funding

- [2009-2014] Alberta Ingenuity Fund/ Centre Program: Alberta Ingenuity Centre for Machine learning, $10,000,000, Co-applicant with M. Bowling, R. Goebel, R. Greiner, R. Holte, D. Schuurmans, R. Sutton, C. Szepesvari, R. Mitchell, Y. Yasui

- [2008-2009] Alberta Ingenuity Fund/ Centre Program: Alberta Ingenuity Centre for Machine learning, $2,000,000, Co-applicant with M. Bowling, R. Goebel, R. Greiner, R. Holte, J. Schaeffer, D. Schuurmans, R. Sutton, C. Szepesvari, S. Lee, R. Mitchell, Y. Yasui

- [2008-2009] Google Research Award, Title: "Generating an Encyclopedic Entry about a Query Subject", $50,000 US, Co-applicant with Dr. Greiner and Dr. Wishart.

- [2008-2009] McCalla Award, $32,000

- [2007-2012] (NSERC) Natural Sciences and Engineering Research Council of Canada (Discovery Grant) Title: "Off-line and Integrated Data Mining for Intelligent Systems", $165,000 ($33,000 per year).

- [2007] (NSERC) Natural Sciences and Engineering Research Council of Canada (Research Tools and Instruments Grant) $64,720, Co-applicant with Dr. Rafiei, Dr. Nascimento and Dr. Sander.

- [2003–2007] (NSERC) Natural Sciences and Engineering Research Council of Canada (Discovery Grant) Title: "Web Mining for Advanced Intelligent e-Learning Systems", $128,000 ($32,000 per year).

- [2005] Alberta Innovation & Science, Title: "Research and Technology Exchange Planning Workshop", $22,000. Co-applicant with Dr. Goebel and Dr. Nascimento

- [2005] Government of Canada Going Global, Title: "Research and Technology Exchange Planning Workshop", $10,000. Co-applicant with Dr. Goebel and Dr. Nascimento

- [1999–2003] (NSERC) Natural Sciences and Engineering Research Council of Canada (Operating Grant) Title: "Web Mining: Extracting useful information from the Web", $67,200 ($16,800 per year).

- [2002] (TeleLearning-NCE) Canada Networks of Centres of Excellence, Research Project Grant, extension of project "Web Mining for Intelligent Restructuring of Web-Based Learning Environment", Project Leader, $14,200.

- [2002] (NSERC) Natural Sciences and Engineering Research Council of Canada (Equipment Grant) Title: "Upgrading the database laboratory equipment at the University of Alberta", $46,206, Co-PI with Dr. Sanders, Dr. Rafiei and Dr. Nascimento.

- [2002–2004] (NSERC) Natural Sciences and Engineering Research Council of Canada (Strategic Grant) Title: "Using Protomics to establish an extracytosolic plant proteins database (EPPdb) and identify root-specific promoters for improved stress tolerance in plants", $401,575, Co-PI with Dr. Taylor, Dr. Good, and Dr. Goebel.

- [2000–2001] (TeleLearning-NCE) Canada Networks of Centres of Excellence, Research Project Grant, Title: "Web Mining for Intelligent Restructuring of Web-Based Learning Environment", Project Leader, Total of $100,000 ($50,000 per year) with Dr. Han

- [2000–2001] (CFI) Canada Foundation for Innovation, New Opportunities Fund (with matching funds from Alberta Innovation and Science and other funds from Telus), Title: "Laboratory for Advanced Computer and Network Systems: End-to-end Performance and Availability", $297,802, Co-PI with Dr. Lu, Dr. MacGregor and Dr. Nascimento.

- [2001] (Project funds) TR-Labs, Research Project, Title: "Educational Software for Micromachines And Related Technologies (eSMART)", $4,000, Co-PI with Dr. Bhattacharia.

- [2000] (NSERC) Natural Sciences and Engineering Research Council of Canada (Equipment Grant) Title: "Improving and supplementing the database laboratory infrastructure at the University of Alberta", $30,671, Co-PI with Dr. Nascimento.

- [1999–2000] (Start-Up) Faculty of Science, University of Alberta, Research Grant, $60,000.

4. Refereed Research Publications

Underlined names are student co-authors

4.1 Publications in Journals

J1. J. Chen, O. R. Zaiane, J. Sander, R. Goebel, **ONDOCS: Ordering Nodes to Detect Overlapping Community Structure**, Annuals of Information Systems, Special Issues on Data Mining for Social Network Data (in press).

J2.   H. Fan, S. Abourizk, H. Kim, O.R. Zaïane, **Assessing Residual Value of Heavy Construction Equipment Using Prediuctive Data Mining Model,** ASCE Journal of Computing in Civil Engineering, pp181-191, Vol.22, Issue 3, May 2008

J3.   D. Perera, J. Kay, K. Yacef, I. Koprinska, O.R. Zaïane, **Clustering and Sequential Pattern Mining of Online Collaborative Learning Data**, IEEE Transactions on Knowledge and Data Engineering, 2008 (in press, accepted June 2008).

J4.   C-H. Lee, O.R. Zaïane, H-H. Park, J. Huang, R. Greiner, **Clustering High Dimensional Data: A Graph-Based Relaxed Optimization Approach**, Information Sciences, Elsevier, 2008 (in press, accepted May 2008).

J5.   H. Fan, O.R. Zaïane, A. Foss, J. Wu, **Top-n Most Outlying data Points in Engineering Data**, Knowledge and Information Systems, An International Journal, Springer verlag, 2008 (in press, accepted February 2008).

J6.   S.R. Oliveira, O.R. Zaïane, **Privacy-Preserving Clustering to Uphold Business Collaboration: A Dimensionality Reduction-Based Transformation Approach**, the International Journal of Information Security and Privacy (IJISP), 1(2):13-36, IDEA Groups, 2007

J7.   S.R Oliveira, O.R. Zaïane, **A Privacy-Preserving Clustering Approach Toward Secure and Effective Data Analysis for Business Collaboration**, Journal on Computers and Security, 26(1): 81-93, 2007.

J8.   U. Basu, J. L. Francis, R.M. Whittal, J.L. Stephens, Y. Wang, O.R. Zaïane, R. Goebel, D.G. Muench, A.G. Good and G.J. Taylor, **Extracellular Proteomes of Arabidopsis Thaliana and Brassica Napus Roots: Analysis and Comparison by MudPIT and LC-MS/MS**, Plant and Soil, Volume 286, Numbers 1-2 / August, Springer, 2006.

J9.   M. El-Hajj, O.R. Zaïane, **Parallel Bifold: Large-Scale Parallel Pattern Mining with Constraints**, Distributed and Parallel Databases, An International Journal, 20(3):225-243, Springer, 2006.

J10. H. Fan, H. Kim, O.R. Zaïane, **Data warehousing for Construction Equipment Management**, Canadian Journal of Civil Engineering (CJCE), 33:1480-1489, 2006.

J11. S.R. Oliveira and O.R. Zaïane, **A Unified Framework for Protecting Sensitive Association Rules in Business Collaboration**, International Journal of Business Intelligence and Data Mining (IJBIDM), 1(3):247-287, 2006.

J12. M. El-Hajj, O.R. Zaïane, **YAFIMA: Yet Another Frequent Itemset Mining Algorithm,** Journal of Digital Information Management, 3(4): 243-248, December 2005.

J13. O.R. Zaïane, **Building Virtual Web Views**, in the Special Issue on "Warehouse Design for Structured and Semistructured Data" of the Journal of Data and Knowledge Engineering, 39(2):143-163, November 2001.

J14. Z-N. Li, O. R. Zaïane, Z. Tauber, **Illumination Invariance and Object Model in Content-Based Image and Video Retrieval**, Journal of Visual Communication and Image Representation, Academic Press, 10(3):219-244, September 1999.

J15. J. Han, Y. Fu, K. Koperski, G. Melli, W. Wang, O. R. Zaïane, **Knowledge Mining in Databases: An Integration of Machine Learning Methodologies with Database Technologies**, Canadian Artificial Intelligence Magazine, Vol. 38, pp. 4-8, Winter 1996, special issue on machine learning.

4.2 Publications in Refereed International Conferences

Citations are based on Google scholar (October 10th, 2008)
(When available, acceptance rates are provided) Underlined names are student co-authors

2010
1. A. Foss, O.R. Zaïane, S. Zilles, **Unsupervised Class Separation of Multivariate Data through Cumulative Variance-based Ranking**, The Ninth IEEE International Conference on Data Mining (ICDM'09), Miami, FL, USA, 6 - 9 December, 2009. (8.9% = 70/786 acceptance rate)

2. D. Cheng, J. Sheldon, M. Marcet-Palacios, O. R. Zaiane, **PROM-OOGLE - Data Mining and Integration of On-line Databases to Discover Gene Promoters**, ACM-SAC 2010 Conference Track on Bioinformatics and Computational Systems Biology (BIO) - Sierre, Switzerland, March 22-26, 2010

3. M. Jalali-Heravi, O. R. Zaiane, **A Study on Interestingness Measures for Associative Classifiers**, ACM-SAC 2010 Conference Track on Data Mining - Sierre, Switzerland, March 22-26, 2010

2009
4. K. Deng, O. R. Zaiane, **Contrasting Sequence Groups by Emerging Sequences**, Discovery Science, Porto, Portugal, 3-5 October 2009

5. J. Chen, O. R. Zaiane and R. Goebel, **Detecting Communities in Large Networks by Iterative Local Expansion**, International Conference on Computational Aspects of Social Networks (CASoN), Fontainebleau, France, June 24-27, 2009

6. J. Chen, O. R. Zaiane and R. Goebel, **Local Community Identification in Social Networks**, International Conference on Advances in Social Networks Analysis and Mining (ASONAM), Athens, Greece, July 20-22, 2009

7. J. Chen, O. R. Zaiane and R. Goebel, **A Visual Data Mining Approach to Find Overlapping Communities in Networks**, International Conference on Advances in Social Networks Analysis and Mining (ASONAM), Athens, Greece, July 20-22, 2009

8. J. Chen, O.R. Zaïane, and R. Goebel, **Detecting Communities in Social Networks using Max-Min Modularity,** SIAM International Conference on Data Mining (SDM'09), Sparks, Nevada, USA, April 30- May 2, 2009

2008

9. J. Chen, O.R. Zaïane, and R. Goebel, **An Unsupervised Approach to Cluster Web Search Results based on Word Sense Communities**, IEEE/WIC/ACM International Conference on Web Intelligence, Sydney, Australia, 9-12 December 2008.

10. J. Enright, B. Chu and O.R. Zaïane, **Intelligent Functional Dependency Tutoring Tool**, 16th International Conference on Computers in Education (ICCE 2008), Taipei, Taiwan, October 27-31, 2008

11. D. Chodos, O.R. Zaïane, **ARC-UI: A Visualization Tool for Associative Classifiers**, 12th International Conference on Information Visualisation IV08, pp 296-301, London, UK, 9 - 11 July, 2008.

2007

12. M. El-Hajj, J. Chen, O.R. Zaïane, and R. Goebel, **Constraint-Based Mining of Web Page Associations**, Twentieth Australian Joint Conference on Artificial Intelligence, Gold Coast, Queensland, Australia, December 2-6, 2007. (31% = 60/194 acceptance rate)

13. A. Satsangi, O.R. Zaïane, **Contrasting the Contrast Sets: An Alternative Approach**, Eleventh International Database Engineering and Applications Symposium (IDEAS 2007), Banff, Canada, September 6-8, 2007. (31% acceptance rate)

14. A. Srivastava, O.R. Zaïane, M-L. Antonie, **Feature Space Enrichment by Incorporation of Implicit Features for Effective Classification**, Eleventh International Database Engineering and Applications Symposium (IDEAS 2007), Banff, Canada, September 6-8, 2007. (31% acceptance rate)

15. J. Chen, T. Zheng, W. Thorne, D. Huntley, O.R. Zaïane and R. Goebel, **Visualizing Web Navigation Data with Polygon Graphs**, 11th International Conference Information Visualization (IV'07), pp 232-237, ETH Zurich, Switzerland, 3-6 July 2007. (55% acceptance rate)

16. J. Chen, T. Zheng, W. Thorne, O.R. Zaïane and R. Goebel, **Visual Data Mining of Web Navigational Data**, 11th International Conference Information Visualization (IV'07), pp649-656, ETH Zurich, Switzerland, 3-6 July 2007. (55% acceptance rate)

2006

17. M-L. Antonie, O.R. Zaïane, R. Holte, **Learning to Use a Learned Model: A Two-Stage Approach to Classification**, The Sixth IEEE International Conference on Data Mining (ICDM'06), pp 33-42, Hong Kong, China, 18 - 22 December, 2006. (9.4% = 73/776 acceptance rate)

18. <u>Y. Pei</u>, O.R. Zaïane, <u>Y. Gao</u>, **An Efficient Reference-based Approach to Outlier Detection in Large Dataset**, The Sixth IEEE International Conference on Data Mining (ICDM'06), pp 478-487, Hong Kong, China, 18 - 22 December, 2006. (9.4% = 73/776 acceptance rate)

19. <u>C-H. Lee</u>, R. Greiner, O.R. Zaïane, **Efficient Spatial Classification using Decoupled Conditional Random Fields**,10th European Conference on Principles and Practice of Knowledge Discovery in Databases (PKDD'06), Berlin, Germany, September 18-22, 2006. (8.7% = 60/685 acceptance rate)

20. <u>M. El-Hajj</u>, O.R. Zaïane, **Parallel Leap: Large-Scale Maximal Pattern Mining in a Distributed Environment**, International Conference on Parallel and Distributed Systems (ICPADS'06), Minneapolis, MN, USA, July 12-15, 2006. (34.9% = 185/529 acceptance rate)

21. <u>H. Fan</u>, O.R. Zaïane, <u>A. Foss</u>, <u>J. Wu</u>, **A Nonparametric Outlier Detection for Effectively Discovering Top-N outliers from Engineering Data**, Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD'06), Singapore, 9-12 April 2006. [*Runner-up Best Paper Award*] (13.4% = 67/501 acceptance rate)

2005

22. <u>M. El-Hajj</u>, O.R. Zaïane, <u>P. Nalos</u>, **Bifold Constraint-Based Mining by Simultaneous Monotone and Anti-Monotone Checking**, The fifth IEEE International Conference on Data Mining (ICDM'05), New Orleans, Louisiana, USA, 27 - 30 November, 2005. (11% = 69/630 acceptance rate)

23. O.R. Zaïane, <u>M. El-Hajj</u>, **Pattern Lattice Traversal by Selective Jumps**, in Proc. 2005 Int'l Conf. on Knowledge Discovery and Data Mining (ACM SIGKDD), Chicago, IL, USA, August 21-24, 2005. (22% = 76/343 acceptance rate)

24. O.R. Zaïane, <u>M. El-Hajj</u>, <u>Y. Li</u>, <u>S. Luk</u>, **Scrutinizing Frequent Pattern Discovery Performance** (demo), IEEE ICDE, Tokyo, Japan, April 2005

25. <u>M. El-Hajj</u>, O.R. Zaïane, **Mining with Constraints by Pruning and Avoiding Ineffectual Processing**, The 18th Australian Joint Conference on Artificial Intelligence, Sydney, Australia 5-9 December 2005. (21.5% = 100/465 acceptance rate)

26. O.R. Zaïane, <u>M-L. Antonie</u>, **On Pruning and Tuning Rules for Associative Classifiers**, Ninth International Conference on Knowledge-Based Intelligence Information & Engineering Systems (KES'05), Melbourne, Australia, September 2005. (49% = 688/1382 acceptance rate)

27. <u>M. El-Hajj</u>, O.R. Zaïane, **Finding All Frequent Patterns Starting From The Closure**, International Conference on Advanced Data Mining and Applications (ADMA'05), pp 67-74, Wuhan, China, July 22-24, 2005. (17% = 100/602 acceptance rate)

28. <u>R. Rak</u>, <u>W. Stach</u>, O.R. Zaïane, <u>M-L. Antonie</u>, **Considering Re-occurring Features in Associative Classifiers**, Nineth Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD'05), Hanoi, Vietnam, May, 2005 (29% = 98/327 acceptance rate)

29. <u>M. El-Hajj</u>, O.R. Zaïane, **On Frequent Itemset Mining with Closure**, International Conference on Information Technology (ICIT 2005) Amman, Jordan, May, 2005. (56% acceptance rate)

2004

30. <u>M-L. Antonie</u> and O.R. Zaïane, **Mining Positive and Negative Association Rules: An Approach for Confined Rules**, 8th European Conference on Principles and Practice of Knowledge Discovery in Databases (PKDD 04), pp 27-38, Pisa, Italy, September 20-24, 2004. (14% = 39/269 acceptance rate) (**47** citations)

31. <u>J. Li</u>, O.R. Zaïane, **Combining Usage, Content, and Structure Data to Improve Web Site Recommendation**, 5th International Conference on Electronic Commerce and Web Technologies (EC-Web 04), Zaragoza, Spain, August 30-September 3, 2004. (35% acceptance rate) (**31** citations)

32. <u>S.R Oliveira</u>, O.R. Zaïane, and Y. Saygin, **Secure Association Rule Sharing**, Eighth Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD'04), pp 74-85, Sydney, Australia, May 26-28, 2004. (21% = 50/235 acceptance rate) (**42** citations)

2003

33. <u>S.R Oliveira</u> and O.R. Zaïane, **Protecting Sensitive Knowledge By Data Sanitization**, Third IEEE International Conference on Data Mining (ICDM'03), pp 613-616, Melbourne, Florida, USA, 19-22 November, 2003. (25% = 128/501 acceptance rate) (**59** citations)

34. <u>M. El-Hajj</u> and O.R. Zaïane, **Inverted Matrix: Efficient Discovery of Frequent Items in Large Datasets in the Context of Interactive Mining**, in Proc. 2003 International Conference on Data Mining and Knowledge Discovery (ACM SIGKDD), pp 109-118, Washington, DC, USA, August 24-27, 2003. (13% = 34/258 acceptance rate) (**36** citations)

35. <u>S.R. Oliveira</u> and O.R. Zaïane, **Privacy Preserving Clustering By Data Transformation**, in Proc. of the 18th Brazilian Symposium on Databases (SBBD 2003), pp 304-318, Manaus, Brazil, 6-8 October 2003. (23% = 26/112 acceptance rate) (**54** citations)

36. <u>M. El-Hajj</u> and O.R. Zaïane, **Non Recursive Generation of Frequent K-itemsets from Frequent Pattern Tree Representations**, in Proc. of 5th International Conference on Data Warehousing and Knowledge Discovery (DaWak'2003), pp 371-380, Prague, Czech Republic, September 3-5, 2003. (31% = 41/130 acceptance rate) (**21** citations)

37. <u>S.R Oliveira</u>, O.R. Zaïane, **Algorithms for Balancing Privacy and Knowledge Discovery in Association Rule Mining**, Proceedings International Database Engineering and Applications Symposium (IDEAS 2003), pp 54-63, Hong Kong, China, July 16-18 2003. (27% = 24/86 acceptance rate) (**41** citations)

38. <u>W. Cheung</u>, O.R. Zaïane, **Incremental Mining of Frequent Patterns Without Candidate Generation or Support Constraint**, Proceedings International Database Engineering and

Applications Symposium (IDEAS 2003), pp 111-116, Hong Kong, China, July 16-18 2003. (27% = 24/86 acceptance rate) (**48** citations)

39. Y. Zhang, M.A. Nascimento, O.R. Zaïane, **Building Image Mosaics: An Application of Content-based Image Retrieval**, IEEE International Conference on Multimedia and Expo, Baltimore, MD, USA, July 6-9, 2003. (50% = 366/731 acceptance rate)

2002

40. M-L. Antonie, O.R. Zaïane, **Text Document Categorization by Term Association**, IEEE International Conference on Data Mining (ICDM'2002), pp 19-26, Maebashi City, Japan, December 9 - 12, 2002. (19% = 72/369 acceptance rate) (**70** citations)

41. A. Foss, O.R. Zaïane, **A Parameterless Method for Efficiently Discovering Clusters of Arbitrary Shape in Large Datasets**, IEEE International Conference on Data Mining (ICDM'2002), pp 179-186, Maebashi City, Japan, December 9 - 12, 2002. (19% = 72/369 acceptance rate) (**20** citations)

42. O.R. Zaïane, C-H.. Lee, **Clustering Spatial Data When Facing Physical Constraints**, IEEE International Conference on Data Mining (ICDM'2002), pp 737-740, Maebashi City, Japan, December 9 - 12, 2002. (19% = 72/369 acceptance rate)

43. O.R. Zaïane, **Building a Recommender Agent for e-Learning Systems**, Proceedings of the International Conference on Computers in Education, pp 55-59, Auckland, New Zealand, December 2002. (23% = 188/800 acceptance rate) (**51** citations)

44. O.R. Zaïane, C-H. Lee, **Clustering Spatial Data in the Presence of Obstacles: a Density-Based Approach**, Proceedings International Database Engineering and Applications Symposium (IDEAS 2002), pp. 214-223, Edmonton, Canada, July 17-19, 2002. (49% = 28/57 acceptance rate) (**20** citations)

45. C-H. Lee, O.R. Zaïane, **Density-Based Clustering of spatial data in the presence of physical obstacles**, The World Congress of Korean and Korean-Ethnic Scientists and Engineers, session on Information & Communication Technology, July 8-13, 2002 Seoul, Korea.

46. O.R. Zaïane, M-L. Antonie, **Classifying text documents by associating terms with text categories**, in Proc. of the Thirteenth Australasian Database Conference (ADC'02), Melbourne, Australia, pp. 215-222, January 28-February 1, 2002. (44% = 22/49 acceptance rate) (**56** citations)

2001

47. O.R. Zaïane, M. El-Hajj, P. Lu, **Fast Parallel Association Rule Mining Without Candidacy Generation**, in Proc. of the IEEE 2001 International Conference on Data Mining (*ICDM'2001*), San Jose, CA, USA, pp. 665-668, November 29-December 2, 2001. (29% = 109/366 acceptance rate) (**40** citations)

48. A. Ammoura, O.R. Zaïane, R. Goebel, **Towards a Novel OLAP Interface for Distributed Data Warehouses**, in Proc. of 3rd International Conference on Data Warehousing and

Knowledge Discovery (DaWak'2001), pp. 174-185, Munich, Germany, September 5-7, 2001. (37% = 34/90 acceptance rate) (**10** citations)

49. O.R. Zaïane, <u>J. Luo</u>, **Towards Evaluating Learners' Behaviour in a Web-based Distance learning environment**, in Proc. of IEEE International Conference on Advanced Learning Technologies (ICALT01), pp. 357-360, Madison, WI, August 6-8, 2001. (37% = 74/200 acceptance rate) (**62** citations)

50. <u>A. Ammoura</u>, O.R. Zaïane, <u>Y. Ji</u>, **Immersed Visual Data Mining: Walking The Walk**, in Proc. of 18th British National Conference on Databases (BNCOD'2001), pp. 202-218, Oxford, UK, July 9-11, 2001, Lecture Notes in Computer Science 2097, Advances in Databases, Springer-Verlag, 2001.

51. O.R. Zaïane, **Web Usage Mining for a Better Web-Based Learning Environment**, in Proc. of Conference on Advanced Technology for Education, pp. 60-64, Banff, Alberta, June 27-28, 2001. (16% = 48/300 acceptance rate) (**87** citations)

2000

52. O. R. Zaïane, J. Han, H. Zhu, **Mining Recurrent Items in Multimedia with Progressive Resolution Refinement**, Int. Conference on Data Engineering (ICDE'2000), pp. 461-470, San Diego, CA, February, 2000. (14% = 41/287 acceptance rate) (**70** citations)

53. O. R. Zaïane, J. Han, **Finding Spatial Associations in Images**, Data Mining and Knowledge Discovery: Theory, Tools, and Technology II, SPIE 14th International Symposium on Aerospace/Defense Sensing, Simulation and Controls, pp. 138-147, Orlando, FL, April, 2000.

1998

54. O. R. Zaïane, J. Han, Z.N. Li, S. H. Chee, J. Y. Chiang, **MultimediaMiner: A System Prototype for Multimedia Data Mining**, in Proc. International Conference on Management of Data (ACM-SIGMOD'98), pp. 581-583, Seattle, June 1998. (**85** citations)

55. O. R. Zaïane, M. Xin, J. Han, **Discovering Web Access Patterns and Trends by Applying OLAP and Data Mining Technology on Web Logs**, in Proc. ADL'98 (Advances in Digital Libraries), pp. 19-29, Santa Barbara, April 1998. (**420** citations)

56. O. R. Zaïane, J. Han, Z-N. Li, J. Hou, **Mining Multimedia Data**, in Proc. CASCON'98: Meeting of Minds, pp. 83-96, Toronto, Canada, November 1998. (39% = 25/64 acceptance rate) (**58** citations)

1997

57. J. Han, J. Chiang, S. Chee, J. Chen, Q. Chen, S. Cheng, W. Gong, M. Kamber, K. Koperski, G. Liu, Y. Lu, N. Stefanovic, L. Winstone, B. Xia, O. R. Zaïane, S. Zhang, H. Zhu, **DBMiner: A System for Data Mining in Relational Databases and Data Warehouses**, in Proc. CASCON'97: Meeting of Minds, pp. 249-260, Toronto, Canada, November 1997. (32% = 23/70 acceptance rate) (**55** citations)

58. O. R. Zaïane, A. Fall, S. Rochefort, V. Dahl, P. Tarau, **On-Line Resource Discovery using Natural Language**, Proc. RIAO'97 Conference, Computer-Assisted Searching on the Internet, pp. 336-355, Montreal, June 1997. (**8** citations)

1996

59. J. Han, Y. Fu, W. Wang, J. Chiang, W. Gong, K. Koperski, D. Li, Y. Lu, A. Rajan, N. S., B. Xia, O. R. Zaïane, **DBMiner: A System for Mining Knowledge in Large Relational Databases**, Proc. International Conference on Data Mining and Knowledge Discovery (KDD'96), pp. 250-255, Portland, Oregon, August 1996. (**163** citations)

60. J. Han, Y. Fu, W. Wang, J. Chiang, O. R. Zaïane, and K. Koperski, **DBMiner: Interactive Mining of Multiple-Level Knowledge in Relational Databases**, Proc. International Conference on Management of Data (ACM-SIGMOD'96), Montreal, Canada, June 1996. (**14** citations)

1995

61. O. R. Zaïane, J. Han, **Resource and Knowledge Discovery in Global Information Systems: A Preliminary Design and Experiment**, Proceedings 1st International Conference on Knowledge Discovery in Databases, pp 331-336, Montreal, Canada, August 1995. (**36** citations)

62. J. Han, O. R. Zaïane, Y. Fu, **Resource and Knowledge Discovery in Global Information Systems: A Scalable Multiple Layered Database Approach**, Proceedings Conference on Advances in Digital Libraries, Washington DC, May 1995. (**10** citations)

1992 and before

63. A. Gamache, R. O. Zaïane, Integration of a smartcard in a distributed medical record system, IFIP WG8.4 conference, Ottawa, Canada, June 1992.

64. A. Gamache, R. O. Zaïane, **La technologie de la carte à puce et la sécurité**, conference du CRISP, R.A.M.Q., Quebec, January, 1992.

65. A. Gamache, P. Ardouin, R. O. Zaïane, et al., **Design constrains and implementation of a PMR smartcard based software**, ACT-91 conference, Toronto, Canada, November 1991.

4.3 Publications in Refereed International Workshops

Citations are based on Google scholar (October 10th, 2008)
(When available, acceptance rates are provided)

4.3.1 Workshop publications with more than 20 citations:

66. S.R. Oliveira and O.R. Zaïane, **Achieving Privacy Preservation When Sharing Data For Clustering**, Workshop on Secure Data Management in a Connected World (SDM'04) in conjunction with VLDB'2004, Springer Verlag LNCS 3178, pp 67-82, Toronto, Canada, August 30, 2004. (**31** citations)

67. M-L. Antonie and O.R. Zaïane, **An Associative Classifier based on Positive and Negative Rules**, 9th ACM SIGMOD Workshop on Research Issues in Data Mining and Knowledge

Discovery (DMKD-04), pp 64-69, Paris, France, June 2004. (**31** citations) (32% = 11/34 acceptance rate)

68. <u>S.R Oliveira</u> and O.R. Zaïane, **Privacy-Preserving Clustering by Object Similarity-Based Representation and Dimensionality Reduction Transformation**, Workshop on Privacy and Security Aspects of Data Mining, in conjunction with the 4th IEEE International Conference on Data Mining (ICDM'04), Brighton, UK, November 1, 2004. (**21** citations)

69. <u>S.R Oliveira</u>, O.R. Zaïane, **Privacy preserving frequent itemset mining**, Workshop on Privacy, Security, and Data Mining, pp 43-54, in conjunction with the IEEE International Conference on Data Mining, MaebashiCity, Japan, December, 2002. (**80** citations)

70. <u>W. Wang</u>, O.R. Zaïane, **Clustering Web Sessions by Sequence Alignment**, Proceedings of the 13th International Workshop on Database and Expert Systems Applications (DEXA 2002), pp 394-398, Aix en Provence, France, September 2-7, 2002. (**44** citations) (34% = 8/23 acceptance rate)

71. O.R. Zaïane, <u>M-L. Antonie</u>, <u>A. Coman</u>, **Mammography Classification by an Association Rule-Based Classifier**, *Third ACM SIGKDD Intl. Workshop on Multimedia Data Mining* (MDM/KDD'2002) in conjunction with Eighth *ACM SIGKDD*, pp. 62-69, Edmonton, Alberta, Canada, 17-19 July 2002. (**45** citations)

72. <u>M-L. Antonie</u>, O.R. Zaïane, <u>A. Coman</u>, **Application of Data Mining Techniques for Medical Image Classification**, in Proc. of Second Intl. Workshop on Multimedia Data Mining (MDM/KDD'2001) in conjunction with Seventh *ACM SIGKDD*, pp. 94-101, San Francisco, CA, August 26, 2001. (**95** citations) (50% = 12/24 acceptance rate)

73. <u>A. Foss</u>, <u>W. Wang</u>, O.R. Zaïane, **A Non-Parametric Approach to Web Log Analysis**, in Proc. of Workshop on Web Mining in First International SIAM Conference on Data Mining (SDM2001), pp. 41-50, Chicago, IL, April 5-7, 2001. (**23** citations) (50% acceptance rate)

74. O. R. Zaïane, J. Han, **WebML: Querying the World-Wide Web for Resources and Knowledge**, in Proc. CIKM'98 Workshop on Web Information and Data Management (WIDM'98), pp. 9-12, Washington DC, November 1998. (**27** citations)

75. J. Han, Y. Fu, K. Koperski, W. Wang, O. R. Zaïane, **DMQL: A Data Mining Query Language for Relational Databases**, SIGMOD Workshop on Research Issues on Data Mining and Knowledge Discovery (DMKD), pp. 27-34, Montreal, Canada, June 1996. (**256** citations)

4.3.2 Other workshop publications:
2008

76. <u>V. Jazayeri</u> and O.R. Zaïane, Plant Protein Localization Using Discriminative and Frequent Partition-Based Subsequences, 4th Workshop on Mining Complex Data, in conjunction with IEEE International Conference on Data Mining, Pisa, Italy, December 15, 2008

77. <u>A. Foss</u> and O.R. Zaïane, The Estimation of True and False Positive Rates in Higher Dimensional Problems and its Data Mining Applications, Foundations of Data Mining Workshop, in conjunction with IEEE International Conference on Data Mining, Pisa, Italy, December 15, 2008

2007

78. O.R. Zaïane, <u>J. Chen</u>, R. Goebel, **DBConnect: Mining Research Community on DBLP Data**, Web Mining and Social Network Analysis Workshop in conjunction with ACM SIGKDD conference, pp 74-81, San Jose, CA, USA, 12 August 2007. (**1** citation) (50% acceptance rate)

2006

79. J. Kay, <u>N. Maisonneuve</u>, K. Yacef, O.R. Zaïane, **Mining Patterns of Events in Students' Teamwork Data**, Proceedings of Educational Data Mining Workshop, held in conjunction with Intelligent Tutoring Systems (ITS), Taiwan, June 26, 2006. (**17** citations)

80. O.R. Zaïane, <u>Y. Wang</u>, R. Goebel, G. Taylor, **Frequent Subsequence-based Protein Localization**, Workshop on Data Mining for Biomedical Applications (BioDM'06), in Conjunction with PAKDD'06, Lecture Notes in Bioinformatics Volume 3916, Springer Verlag, pp 35-47, Singapore, April 2006. (1 citation) (40% = 14/35 acceptance rate)

2005

81. <u>M. El-Hajj</u>, O.R. Zaïane, **Implementing Leap Traversals of the Itemset Lattice**, in ACM SIGKDD Open Source Data Mining Workshop on Frequent Pattern Mining Implementations (OSDM'05), Chicago, IL, USA, August 21, 2005.

2004

82. <u>Y. Wang</u>, O.R. Zaïane, R. Goebel, J.L. Southron, U. Basu, R.M. Whittal, J.L. Stephens, G.J. Taylor, **Developing a Database for Proteomic Analysis of Extracytosolic Plant Proteins**, Second International Workshop on Biological Data Management (BIDM'2004) in conjunction with the 15th Int' Conf. on Database and Expert Systems Applications DEXA2004, Zaragoza, Spain, August, 2004. (**2** citations) (44% acceptance rate)

83. <u>J. Li</u> and O.R. Zaïane, **Using Distinctive Information Channels for a Mission-based Web Recommender System**, Sixth ACM SIGKDD workshop on Webmining and Web Analysis (WebKDD 2004), pp 35-46, Seattle, WA, USA, August 22, 2004. (**6** citations) (acceptance rate <33%)

84. <u>S.R. Oliveira</u> and O.R. Zaïane, **Toward Standardization in Privacy-Preserving Data Mining**, ACM SIGKDD 3rd Workshop on Data Mining Standards (DM-SSP 2004), pp 7-17, Seattle, WA, USA, August 22, 2004. (**7** citations)

85. <u>J. Chen</u>, <u>L. Sun</u>, O.R. Zaïane and R. Goebel, **Visualizing and Discovering Web Navigational Patterns**, Seventh ACM SIGMOD International Workshop on the Web and Databases (WebDB 2004), pp 13-18, Paris, France, June 2004. (**12** citations) (26% = 16/61 acceptance rate)

86. <u>M. El-Hajj</u> and O.R. Zaïane, **COFI Approach for Mining Frequent Itemsets Revisited**, 9th ACM SIGMOD Workshop on Research Issues in Data Mining and Knowledge Discovery (DMKD-04), pp 70-75, Paris, France, June 2004. (**3** citations) (32% = 11/34 acceptance rate)

2003

87. <u>M-L. Antonie</u>, O.R. Zaïane, <u>A. Coman</u>, **Associative Classifiers for Medical Images**, Lecture Notes in Artificial Intelligence 2797, Mining Multimedia and Complex Data, pp 68-83, Springer-Verlag, 2003. (**16** citations)

88. <u>M. El-Hajj</u> and O.R. Zaïane, **COFI-tree Mining: A New Approach to Pattern Growth with Reduced Candidacy Generation**, in Workshop on Frequent Itemset Mining Implementations (FIMI'03) in conjunction with IEEE-ICDM 2003, Melbourne, Florida, USA, 19 November, 2003. (**5** citations)

89. <u>M. El-Hajj</u> and O.R. Zaïane, **Parallel Association Rule Mining with Minimum Inter-Processor Communication**, Fifth International Workshop on Parallel and Distributed Databases (PaDD'2003) in conjunction with the 14th International Conference on Database and Expert Systems Applications DEXA2003, pp 519-523, Prague, Czech Republic, September 1-1September 5, 2003. (**4** citations)

2002

90. <u>S.R Oliveira</u>, O.R. Zaïane, **Foundations for an Access Control Model for Privacy Preservation in Multi-Relational Association Rule Mining**, Workshop on Privacy, Security, and Data Mining, pp 19-26, in conjunction with the IEEE International Conference on Data Mining, Maebashi City, Japan, December 9, 2002. (**9** citations)

91. O.R. Zaïane, <u>A. Strilets</u>, **Finding Similar Queries to Satisfy Searches based on Query Traces**, Proceedings of the International Workshop on Efficient Web-Based Information Systems (EWIS), Montpellier, France, pp 207-216, Lecture Notes in Computer Science 2426, Advances in Object-Oriented Information Systems, Springer-Verlag, September 2002. (**10** citations)

2001

92. <u>H. Cui</u>, O.R. Zaïane, **Hierarchical Structural Approach to Improving the Browsability of Web Search Engine Results**, in Proc. of International Workshop on Digital Libraries (DLib'2001) in conjunction with 12th International Conference on Database and Expert Systems Applications DEXA'2001, pp. 956-960, Munich, Germany, September 3-7, 2001. (**4** citations) (50% acceptance rate)

93. O.R. Zaïane, <u>A. Ammoura</u>, **On-Line Analytical Processing while Immersed in a Cave**, 2nd International Workshop on User Interfaces to Data Intensive Systems (UIDIS'01), pp. 102-115, Zurich, Switzerland, May 31-June 1, 2001

2000

94. <u>B. Matichuk</u>, O.R. Zaïane, **Unsupervised Classification of Sound for Multimedia Indexing**, First Intenational Workshop on Multimedia Data Mining MDM/KDD 2000, pp. 31-36, Boston, August 2000. (**2** citations)

1999

95. O. R. Zaïane, E. Hagen, J. Han, **Word Taxonomy for On-line Visual Asset Management and Mining**, Fourth International Workshop on Application of Natural Language to Information Systems (NLDB'99), pp 271-276, Klagenfurt, Austria, June, 1999. (**4** citations)

1998

96. Z.N. Li, O. R. Zaïane, B. Yan, **C-BIRD: Content-Based Image Retrieval from Image Repositories Using Chromaticity and Recognition Kernel**, Intl. Workshop on Storage and Retrieval Issues in Image and Multimedia Databases, in 9th Intl. Conference on Database and Expert Systems (DEXA'98), pp. 361-366, Vienna, Austria, August 1998. (**8** citations)

1997

97. O. R. Zaïane, A. Fall, S. Rochefort, V. Dahl, P. Tarau, **Concept-Based Retrieval using Controlled Natural Language**, in Proc. Workshop on Applications of Natural Language to Information Systems (NLDB97), pp. 11-26, Vancouver, June 1997. (**6** citations)

1993 and before

98. R. O. Zaïane, A. Gamache, Optimisation de l'espace memoire du DMP par compression des transactions médicales, 61e congres de l'ACFAS, Rimouski, 1993.

99. A. Jaoua, R. O. Zaïane, et al., **Forward error recovery; toward a preventive methodology**, Proceedings of the Workshop on Constructive Algorithms: The Role of Relations in Program Development, Hollum-Ameland, Netherlands, September 1990.

4.4 Book Chapters

B1. S.R. Oliveira, O.R. Zaiane, **Privacy-Preserving Clustering to Uphold Business Collaboration: A dimensionality reduction-based Transformation Approach**, Chapter in Techniques and Applications for Advanced Information Privacy and Security: Emerging Organizational, Ethical, and Human Issues, edited by Nemati, published by IGI Global, 2009, pp 79-102.

B2. M-L. Antonie, D. Chodos and O.R. Zaiane, **Variations on Associative Classifiers and Classification Results Analyses**, Chapter in Post-Mining of Association Rules: Techniques for Effective Knowledge Extraction, edited by Yanchang Zhao, Chengqi Zhang and Longbing Cao, published by IGI Global, 2009

B3. O. R. Zaïane, J. Chen, and R. Goebel, **Mining Research Communities in Bibliographical Data**, Chapter in Advances in Web Mining and Web Usage Analysis, edited by Myra Spilopoulou, Haizheng Zhang,published by Springer Verlag, 2008.

B4. S.R. Oliveira, O. R. Zaïane, **Privacy-Preserving Data Mining on the Web: Foundations and techniques**, Chapter in Data warehousing and Mining: Concepts, Methodologies, Tools and Applications, edited by John Wang, published by IGI Global, 2008, ISBN: 978-1-59904-951-9.

B5. S.R. Oliveira, O. R. Zaïane, **Business Collaboration by Privacy-Preserving Clustering**, Chapter in Social Implications of Data Mining and Information Privacy: Interdisciplinary frameworks and solutions, edited by Ephrem Eyob, published by IGI Global, 2008.

B6. M. El-Hajj and O. R. Zaïane, **Bi-Directional Constraint Pushing in frequent Pattern Mining**, Chapter II in *Data Mining Patterns*: *New Methods and Applications*, edited by Pascal Poncelet, Maguelonne Teisseire and Florent Masseglia, pp 32-56, Published by Information Science Reference, 2007, ISBN978-159904162-9

B7. O.R. Zaïane, <u>J. Li</u> and R. Hayward. Mission-based Navigational Behaviour Modeling for Web Recommender Systems. In B. Mobasher, O. Nasraoui, B. Liu, and B. Massand (Eds): Mining and Web Usage Analysis, Lecture Notes in Artificial Intelligence, Springer Verlag, LNAI 3932, pp. 37-55. 2006, ISBN:978-3-540-47127-1.

B8. O. R. Zaïane, **Recommender Systems for e-Learning: Towards non-Intrusive Web Mining**, Chapter V in *Data Mining in E-elearning*, edited by Cristóbal Romero and Sebastián Ventura, pp 79-96, published by WitPress , in the Series: Advances in Management Information, Volume 4, 2006, ISBN:1-84564-152-3.

B9. <u>S.R. Oliveira</u> and O. R. Zaïane, **Foundations and techniques for Privacy Preserving Data Mining on the Web**, pp. 282-301, Chapter XIV in *Web and Information Security*, edited by Elena Ferrari and Bhavani Thuraisingham, published by Idea Group Publisher, 2006, ISBN:1-59140-589-0.

B10. <u>M.L. Antonie</u>, O. R. Zaïane, <u>A. Coman</u>, **Associative Classifiers for Medical Images**, pp 68-83, Chapter 5 in *Mining Multimedia and Complex Data*, edited by Osmar Zaïane, Simeon Simoff and Chabane Djeraba, published by Springer Verlag, 2003, LNAI 2797, ISBN 3-540-20305-2

B11. O. R. Zaïane, **Discovering Patterns With and Within Images**, pp 27-42, Chapter 2 in *Multimedia Mining- A Highway to Intelligent Multimedia Documents*, edited by Chabane Djeraba, published by Kluwer Accademic Publishers, 2002, ISBN:1-4020-7247-3.

B12. O. R. Zaïane, **The Infant Days of Multimedia Data Mining**, pp. 428-439, Chapter 5 in *Dealing with the Data Flood: Mining Data, Text and Multimedia,* edited by Jeroen Meij, SST Publications, Netherlands, 2002. ISBN 90-804496-6-0

B13. J. Han, O. R. Zaïane, S. Chee and J. Y. Chiang, **Towards On-Line Analytical Mining on the Internet for Electronic Commerce**, pp. 169-183, Chapter 11 in *Electronic Commerce Technology Trends: Challenges and Opportunities,* edited by Weidong Kou and Yelena Yesha, published by IBM Press, 2000. ISBN 1-58347-009-3

4.5 Edited Books

E1. R. Alhajj, H. Gao, X. Li, J. Li, O.R. Zaïane, Advanced Data Mining and Applications, published by Springer Verlag, Lecture Notes in Artificial Intelligence Volume 4632, 2007, ISBN: 978-3-540-73870-1.

E2. O. Nasraoui, O.R. Zaïane, M. Spiliopoulou, B. Mobasher, B. Masand, P.S. Yu, Advances in Web Mining and Web Usage Analysis, published by Springer Verlag, Lecture Notes in Artificial Intelligence Volume 4198, 2006, ISBN:3-540-46346-1.

E3. X. Li, O.R. Zaïane, Z. Li, Advanced Data Mining and Applications, published by Springer Verlag, Lecture Notes in Artificial Intelligence Volume 4093, 2006, ISBN:3-540-37025-0.

E4. O.R. Zaïane, S.J. Simoff, C. Djeraba, Mining Multimedia and Complex Data, published by Springer Verlag, Lecture Notes in Artificial Intelligence Volume 2797, 2003, ISBN:3-540-20305-2.

E5. O.R. Zaïane, J. Srivastava, M. Spiliopoulou, B. Masand, WEBKDD 2002: Mining Web Data for Discovering Usage Patterns and Profiles, published by Springer Verlag, Lecture Notes in Artificial Intelligence Volume 2703, 2003, ISBN:3-540-20304-4.

4.6 Invited Publications (non-refereed)

I1. G. Melli, O.R. Zaïane, B. Kitts, **Introduction to the Special Issue on Successful Real-World Data Mining Applications**, SIGKDD Explorations, Vol 8, N 1, June 2006, pp 1-2.

I2. O. Nasraoui, O.R. Zaïane, M. Spiliopoulou, B. Mobasher, B. Masand, P.S. Yu, WebKDD 2005 . **Web Mining and Web Usage Analysis Post-Workshop report**, in SIGKDD Explorations, Vol 7, N 2, December 2005, pp 139-142.

I3. O.R. Zaïane, **Relevance of Counting in Data Mining tasks**, (keynote speech) International Conference on Advanced Data Mining and Applications (ADMA'05), pp 14-18, Wuhan, China, July 22-24, 2005.

I4. B.M. Masand, M. Spiliopoulou, J. Srivastava, and O.R. Zaïane, **WEBKDD 2002 - Web Mining for Usage Patterns & Profiles**, in SIGKDD Explorations, Vol 4, N 2, January 2003, pp 125-127.

I5. S.J. Simoff, C. Djeraba, and O.R. Zaïane, **MDM/KDD2002: Multimedia Data Mining between Promises and Problems,** in SIGKDD Explorations, Vol 4, N 2, January 2003, pp 118-121.

I6. O.R. Zaïane, guest editor, Special Issue on Multimedia Data Mining, Journal of Intelligent Information Systems, 19:1, Kluwer Academic Publishers, 2002.

I7. O.R. Zaïane, A. Foss, C-H. Lee, W. Wang, **On Data Clustering Analysis: Scalability, Constraints and Validation**, in Proc. of the Sixth Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD'02), Taipei, Taiwan, May, 2002, pp 28-39. (Cited **27** times according to Google Scholar as of October 10th 2008)

I8. O.R. Zaïane, S.J. Simoff, MDM/KDD: **Multimedia Data Mining for the Second Time**, in SIGKDD Explorations, Vol 3, N 2, January 2002, pp 65-67.

I9. S.J. Simoff, O.R. Zaïane, **Report on MDM/KDD2000: The First International Workshop on Multimedia Data Mining**, in SIGKDD Explorations, Vol 2, N 2, December 2000, pp 103-105.

4.7 Edited Conference Proceedings

- Proceedings of **Tenth WEBKDD International Workshop: Web Mining and Web Usage Analysis**, August 24, 2008, Las Vegas, Nevada, USA

- Proceedings of the **Seventh IEEE International Conference on Data Mining**, October 28-31, 2007, Omaha, NE, USA
- Proceedings of the Third International conference on Advanced Data Mining and Applications (ADMA), Harbin, China, August 6-8, 2007
- Proceedings of the Second International conference on Advanced Data Mining and Applications (ADMA), Xi'an, China, August 14-16, 2006
- Proceedings of the **Seventh WEBKDD International Workshop: Taming Evolving, Expanding and Multi-Faceted Web Clickstreams**, in conjunction with KDD-2005: Eleventh ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, August 21, 2005, Chicago, IL, USA
- Proceedings of the **Fifth WEBKDD International Workshop: Web Mining as a Premise to Effective and Intelligent Web Applications**, in conjunction with KDD-2003: Ninth ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, August 24, 2003, Washington, DC, USA
- Proceedings of the **Eighth ACM SIGKDD International Conference on Knowledge Discovery & Data Mining**, July 23-26, 2002, Edmonton, Alberta, Canada
- Proceedings of the **Sixth International Database Engineering and Applications Symposium (IDEAS'02)**, July 17-19, 2002, Edmonton, Alberta, Canada
- Proceedings of the **Third International Workshop on Multimedia Data Mining (MDM/KDD2002)** in conjunction with KDD-2002: Eighth ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, July 22, 2002, Edmonton, Alberta, Canada
- Proceedings of the **Fourth WEBKDD International Workshop: Web Mining for Usage Patterns and User Profiles** in conjunction with KDD-2002: Eighth ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, July 22, 2002, Edmonton, Alberta, Canada
- Proceedings of the **International Workshop on Knowledge Discovery in Multimedia and Complex Data (KDMCD'02)** in conjunction with PAKDD-2002: 6th Pasific-Asia Conference on Knowledge Discovery and Data Mining, May 6, 2002, Taipei, Taiwan
- Proceedings of the **Second International Workshop on Multimedia Data Mining (MDM/KDD2001)** in conjunction with KDD-2001: Seventh ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, August 26-29, 2001, San Francisco, CA, USA
- Proceedings of the **First Workshop on Multimedia Data Mining (MDM/KDD2000)** in conjunction with KDD-2000: Sixth ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, August 20-23, 2000, Boston, MA, USA

4.8 Technical Reports

T1. J. Chen, O. R. Zaiane, R. Goebel, P. S. Yu, **TupleRank: Ranking Relational Databases using Random Walks on Extended K-partite Graphs**, Technical Report TR09-02, Department of Computing Science, University of Alberta, Edmonton, AB, Canada, February 2009.

T2. D. Cheng, J. Sheldon, M. Marcet-Palacios, and O.R. Zaïane, **PROM-OOGLE – Data mining and Integration of On-line Databases to Discover Gene Promoters**, Technical Report

TR08-13, Department of Computing Science, University of Alberta, Edmonton, AB, Canada, September, 2008

T3. J. Enright, B. Chu and O.R. Zaïane, **Intelligent Functional Dependency Tutoring Tool**, Technical Report TR08-12, Department of Computing Science, University of Alberta, Edmonton, AB, Canada, August, 2008

T4. O.R. Zaïane, K. Yacef, J. Kay, **Finding Top-n Emerging Sequences to Contrast Sequence Sets**, Technical Report TR07-03, Department of Computing Science, University of Alberta, Edmonton, AB, Canada, February 2007

T5. A. Foss and O.R. Zaïane, **Effective Subspace Clustering with Dimension Pairing**, Technical Report TR06-23, Department of Computing Science, University of Alberta, Edmonton, AB, Canada, October 2006

T6. C-H. Lee and O.R. Zaïane, **A Spatial Entity Representation to Prune Search Spaces**, Technical Report TR06-16, Department of Computing Science, University of Alberta, Edmonton, AB, Canada, June 2006

T7. Y. Pei, Osmar Zaïane, **A Synthetic Data Generator for Clustering and Outlier Analysis**, Technical Report TR06-15, Department of Computing Science, University of Alberta, Edmonton, AB, Canada, June 2006

T8. S.R. Oliveira and O.R. Zaïane, **Data Perturbation by Rotation for Privacy-Preserving Clustering**, Technical Report TR04-17, Department of Computing Science, University of Alberta, Edmonton, AB, Canada, August 2004

T9. M-L. Antonie and O.R. Zaïane, **Mining Positive and Negative Association Rules: An Approach for Confined Rules**, Technical Report TR04-07, Department of Computing Science, University of Alberta, Edmonton, AB, Canada, April 2004

T10. S.R. Oliveira and O.R. Zaïane, **Improving the balance between privacy and knowledge discovery: An efficient one-scan sanitization that upholds KDD**, Technical Report TR03-15, Department of Computing Science, University of Alberta, Edmonton, AB, Canada, June 2003.

T11. S.R. Oliveira and O.R. Zaïane, **Geometric Data Transformation For Privacy Preserving Clustering**, Technical Report TR03-12, Department of Computing Science, University of Alberta, Edmonton, AB, Canada, May 2003

T12. M. El-Hajj and O.R. Zaïane, **Inverted Matrix: Efficient Discovery of Frequent Items in Large Datasets in the Context of Interactive Mining**, Technical Report TR03-08, Department of Computing Science, University of Alberta, Edmonton, AB, Canada, March 2003

T13. S.R. Oliveira and O.R. Zaïane, **A Framework for Enforcing Privacy in Mining Frequent Patterns**, Technical Report TR02-13, Department of Computing Science, University of Alberta, Edmonton, AB, Canada, June 2002.

T14. W. Wang and O.R. Zaïane, **Clustering Web Sessions by Sequence Alignment**, Technical Report TR02-07, Department of Computing Science, University of Alberta, Edmonton, AB, Canada, May 2002

T15. O.R. Zaïane, A. Foss, C-H. Lee and W. Wang, **Data Clustering Analysis - From Simple Groupings to Scalable Clustering With Constraints**, Technical Report TR02-03, Department of Computing Science, University of Alberta, Edmonton, AB, Canada, March 2002

T16. S.R. Oliveira; Mario A. Nascimento and O.R. Zaïane, **Digital Watermarking: Status, Limitations and Prospects**. Technical Report TR02-01, Department of Computing Science, University of Alberta, Edmonton, AB, Canada, January 2002.

T17. O.R. Zaïane, M. El-Hajj, Paul Lu, **Fast Parallel Association Rule Mining Without Candidacy Generation**, Technical Report TR01-12, Department of Computing Science, University of Alberta, Edmonton, AB, Canada, August 2001

T18. O.R. Zaïane, **Web Usage Mining for a Better Web-Based Learning Environment**, Technical Report TR01-05, Department of Computing Science, University of Alberta, April 2001

T19. O.R. Zaïane, M-L. Antonie, **Associating Terms with Text Categories**, Technical Report TR01-04, Department of Computing Science, University of Alberta, April 2001

T20. O.R. Zaïane, A. Ammoura, **An Immersed Virtual Environment for Data WarehouseVisualization: Challenges and Implementation**, Technical Report TR00-17, Department of Computing Science, University of Alberta, September 2000

T21. O.R. Zaïane, **From Resource Discovery to Knowledge Discovery on the Internet**, Technical Report TR 1998-13, Simon Fraser University, August, 1998

T22. Ze-Nian Li, O.R. Zaïane, Bing Yan, **C-BIRD: Content-Based Image Retrieval from Image Repositories Using Chromaticity and Recognition Kernel**, Technical Report CMPT98-03, Simon Fraser University, February, 1998

T23. O. R. Zaïane, P. Triantafillou, J. Han, **Consistency in Card-Based Mobile Databases**, Technical Report CMPT96-03, Simon Fraser University, August, 1996

T24. J. Han, O. R. Zaïane, Y. Fu, **Resource and Knowledge Discovery in Global Information Systems: A Multiple Layered Database Approach**, Technical Report CMPT94-10, Simon Fraser University, November 1994.

T25. R. O. Zaïane, A. Gamache, **Correspondance entre les zones logiques et physiques du dossier de l'aide-mémoire médical**, Technical Report DIUL-RT-9201, Département d'informatique, Université Laval, 1992, 27p.

T26. Gamache A., Ardouin P., Durant P. and Zaïane R., **Design Constraints and Implementation of a PMR Smart Card Based Software**, Technical Report DIUL-RR-9116, Département d'informatique, Université Laval, Sainte-Foy (Québec), November 1991.

T27. Gamache A., Ardouin P., Durant P., Iratni R. et Zaïane R., **Étude de la technologie des cartes à microprocesseur pour l'implantation du dossier médical portable**, Technical Report DIUL-RR-9112, Département d'informatique, Université Laval, Sainte- Foy (Québec), May 1991.

4.9 Software and other Scholarly Works

DBMiner: A system for data mining in relational databases and data warehouses. It uses an Online-analytical processing (OLAP) engine in the background and allows generic data mining tasks such as summarization, discrimination, classification, clustering and association analysis. It was demonstrated at ACM SIGMOD conference 1996, ACM SIGKDD conference 1997, and CASCON 1997. The system is currently commercialized by DBMiner Technology Inc. *Major contribution*: Design of the early user interface of the software; Participation in the design of some idiosyncratic algorithms; Design of DMQL, the data mining query language used within the system; Design and implementation of the Web-based version, including visualization tools.

MultimediaMiner: A system prototype for mining high-level multimedia information and knowledge from large multimedia (still images and video) databases. It was demonstrated at ACM SIGMOD conference 1998. *Major contribution*: Design and implementation of the prototype.

C-BIRD: A system for content-based image retrieval. It retrieves images and video sequences from multimedia databases based on visual features such as colour, texture, shape and complex objects. The system treats colours based on illumination variations. It was demonstrated at CASCON 1997. *Major contribution*: Design and implementation of the user interface and the full version of the client-server architecture on the Web; Participation in the design of the model-based search algorithm for the retrieval by object.

Virtual-U: An online learning software that provides comprehensive course design, delivery, and management capabilities on the Web. Was demonstrated at many conferences, among others CASCON 1997. The system is currently commercialized by Virtual Learning Environments Inc. *Major contribution*: Design and implementation of most of the modules, such as the GradeBook, the Assignment Submission Tools, the Chat Tool, the Workspace, etc.

DIVE-ON: Data mining in an Immersed Virtual Environment Over a Network is a project for visual data mining and discovered pattern visualization in a 3D CAVE (immersive virtual reality environment). The developed prototype allows "walking" through the data and analyse the data with OLAP capabilities while immersed in a 3D environment. *Major contribution*: Design of the system and supervision of graduate student.

J-Walker: An online search engine collecting results from other search engines and classifying the documents in a taxonomy based on WordNet. *Major contribution*: Design of the system and supervision of graduate student.

DbConnect: A community mining system with an on-line collaboration recommendation system allowing the browsing of social networks of researchers, conferences and topics.

5. Invited Talks and Tutorials

5.1 Invited Talks

1. **The Challenge of Mining Billions of Transactions**, keynote speech, International Workshop on Algorithms for Large-Scale Information Processing in Knowledge Discovery, in conjunction with PAKDD 2008, the 12th Pacific-Asia Conference on Knowledge Discovery and Data Mining, Osaka, Japan, May 20, 2008.
2. **Medicine and Informatics: A Challenging Marriage,** Health Informatics Forum, University of Alberta – Capital Health, Edmonton, March 13, 2008.
3. **Le forage des réseaux sociaux**, keynote speech, 8èmes journées francophones Extraction et Gestion des Connaissances (EGC '08), Sophia-Antipolis, France, February, 1st, 2008
4. **Where are we heading with the Associative Classifiers?**, Virginia Tech, Roanoke, Virginia, USA, August 31 2007.
5. **Classement par association : une alternative prometteuse**, Université de Caen, France, November 13, 2006
6. **Where are we heading with the Associative Classifiers?**, Seoul National University, Seoul, Korea, June 19 2006.
7. **Where are we heading with the Associative Classifiers?**, University of Hokkaido, Sapporo, Japan, May 22, 2006.

8. **The potential of Associative Classifiers**, School of Computing Science, Simon Fraser University, Canada, January 25, 2006.
9. **The potential of Associative Classifiers**, School of Information Technology & Electrical Engineering University of Queensland, Brisbane, Australia, December 1st, 2005.
10. **Data Transformation for Privacy-Preserving Data Mining**, Basser Seminar Series, School of Information Technology, University of Sydney, Australia, November 23, 2005.
11. **The potential of Associative Classifiers**, Department of Computer Science and Software Engineering, University of Canterbury, Christchurch, New Zealand, November 11, 2005.
12. **An Intelligent Tutoring System for Functional Dependencies and its Analysis Tools**, Intelligent Learning Environment Research Group, School of Information Technology, University of Sydney, Australia, October 26, 2005.
13. **The potential of Associative Classifiers**, Department of Computer Science, University of Auckland, New Zealand, September 9, 2005.
14. **The potential of Associative Classifiers**, Faculty of Information Technology, University of Technology Sydney, Australia, August 31, 2005.
15. **Associative Classifiers: On Rule Generation, Pruning and Selection**, School of Computing Science and Engineering, University of New South Wales, Australia, August 26, 2005.
16. **Coupling Typical Data Mining with classical Machine learning**, Machine Learning Group, School of Information Technology, University of Sydney, Sydney, Australia, August 2, 2005.
17. **Considering three information channels for a better non-intrusive recommender system**, Knowledge Management Group, School of Information Technology, University of Sydney, Sydney, Australia, July 29, 2005.
18. **Considering three information channels for a better non-intrusive recommender system**, International School of Software, Wuhan University, Wuhan, China, July 23, 2005.
19. **Relevance of Counting in Data Mining Tasks,** International Conference on Advanced Data Mining and Applications (ADMA 2005), Wuhan, China, July 22-24, 2005.
20. **Investigations In Data Mining: China-Canada Research Cooperation**, Harbin Institute of Technology, Harbin, Heilongjiang, China, March 8, 2005.
21. **Building Blocks for Data Mining Research**, Beijing University, Beijing, China, March 11, 2005.
22. **On the Usefulness of Frequent itemsets for Building Classifier Models**, School of Computing and Information Technology, Griffith University, Brisbane, Australia, June 1, 2004.
23. **Associative Classification of Multimedia Documents**, Interactive Digital Multimedia Seminar Series, University of California, Santa Barbara, USA, February 20, 2004
24. **Supporting On-Line Learning Systems with Data Mining**, Département d'Informatique et Recherche opérationnelle, Colloques du DIRO, Faculté des Arts et des Sciences, University de Montréal, Montreal, PQ, Canada, November 13, 2003.
25. **Concepts and Applications of Web Mining**, Department of Computer Systems, Faculty of Information Technology, University of Technology, Sydney, Sydney, Australia, November 4, 2003.
26. **More on Frequent Pattern Mining: An Asset for Novel Categorization and Recommender Systems Design**, Faculty of Engineering, Institute for Information and

Communication Technologies, University of Technology Sydney, Sydney, Australia, October 30, 2003.

27. **Pushing the boundary for Mining Frequent Itemsets**, School of Information Technologies, Basser seminar series, University of Sydney, Sydney, NSW, Australia, October 29, 2003.
28. **Do We Need New Algorithms in Data Mining?**, Faculty of Information Technology, University of Technology Sydney, Sydney, NSW, Australia, October 22, 2003.
29. **Data Mining of Large Volumes of Data**, ICT Forum - Storage and Management of Large Multimedia Databases, Edmonton, Canada, May 27, 2003.
30. **Virtual Exploration of Scientific and Financial Data**, ICT Forum - Man and Machine: New Technologies for Visual Human-Computer Interaction, Edmonton, Canada, May 30, 2002.
31. **On Data Clustering Analysis: Scalability, Constraints and Validation**, Sixth Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD'02), Taipei, Taiwan, May, 2002.
32. **Data Mining Assisting e-Learning**, in Panel "The Impact of New technologies on TeleLearning", at the TeleLearning Conference 2001, Vancouver, BC, Canada, 10-13 November 2001.
33. **State of the Art in Multimedia Data Mining**, at the Workshop MultiMediaMining, DaimlerChrysler Research Center Ulm, Germany, 21, 22 December 2000.
34. **Data Mining from the Web**, at the Departamento de Informática, Universidade Federal de Pernambuco and Radix.com, Recife, Brazil, October 6, 2000.
35. **Mining Multimedia Data**, in SBBD'2000: XIV Brazilian Symposium on Databases, Promoted by the Brazilian Computer Society in cooperation with ACM SIGMOD, João Pessoa, Paraíba, Brazil, October 3, 2000.
36. **From Resource Discovery to Knowledge Discovery on the Internet**, for CelCorp, Edmonton, April 4, 2000
37. **Content-Based Image and Video Retrieval from Multimedia Repositories**, Invited lecture at the Technical University of British Columbia (TechBC), Surrey, Canada, October, 1998.
38. **Student and Teacher Tools for the Virtual University**, Connections'96-Linking Teaching, Learning and Technology, Vancouver, Canada, May 10, 1996.

5.2 Tutorials at International Conferences and Invited Courses

1. **Advances and Issues in Frequent Pattern Mining**, Tutorial at the Eighth Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD'04), Sydney, Australia, 26 May, 2004.
2. **Concepts and Applications of Web Mining**, Tutorial for PhD students, Wuhan University, Wuhan, China, July 24, 2005.
3. **Concepts and Applications of Web Mining**, Tutorial for PhD students, Department of Computer Science, Faculty of Information Technology, University of Technology Sydney, Australia, November 3, 2003.
4. **Data Clustering Analysis, from Simple Groupings to Scalable Clustering with Constraints**, Tutorial   at the Sixth Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD'02), pp 137-201, Taipei, Taiwan, May, 2002.

5. **Knowledge Discovery in Data,** a 20 hour training course given at the Alberta Research Council, Calgary, Canada, January 2002.
6. **Web Mining: From Concepts to Practical Systems**, Tutorial at the 7th International Conference on Database Systems for Advanced Applications (DASFAA'2001), Hong Kong, China, April 18-20, 2001.
7. **Web Mining: Concepts, Practices and Research**, Tutorial at the SBBD'2000: XIV Brazilian Symposium on Databases, Promoted by the Brazilian Computer Society, pp. 410-474, João Pessoa, Paraíba, Brazil, October 2 - 4, 2000.
8. **Interactive Websites for E-Commerce**, Tutorial for the graduate program "Technologies d'Information en Commerce Electronique" (TICE), at the Institut des hautes Etudes Commerciales de Carthage, Carthage, Tunisia, May 2000. (language of instruction: French)
9. **Where Web Applications Meet Databases**, Tutorial at the TeleLearning-NCE Web Technology Workshop, Montreal, Canada, May 1997.

6. Teaching, Supervision and Administration Services

6.1 Teaching Undergraduate and Graduate Courses

6.1.1 Undergraduate Courses Taught

Simon Fraser University
- CMPUT 354: Database Systems and Structures, Spring 1998

University of Alberta
- CMPUT 499-CMPUT 410 Web-Based Information Systems, Winter 2001, 2002, 2004, 2009, Fall 2004, 2006, 2007
- CMPUT 496 Intelligent Tutoring System Development, Fall 2008
- CMPUT 391 Database Management Systems, Fall 2001, Winter 2002, 2003, 2004
- CMPUT 102 Structural Programming and Data Structures, Winter 2000, Fall 2000, 2006, Winter 2008

6.1.2 Graduate Courses Taught

University of Alberta
- CMPUT 695 Principles of Knowledge Discovery in Data, Fall 1999, Fall 2000, Fall 2002, Fall 2004, and Winter 2007.
- CMPUT 695 Data Mining and Knowledge Discovery, Fall 2007.
- CMPUT 605 Mining Health and Medical Data, Winter 2008
- CMPUT 605 Mining Web Links, Fall 2006
- CMPUT 605 Web-based Delivery of Scalable 3D Worlds, Fall 2006
- CMPUT 605 Cross Industry Standard Process for Data Mining, Winter 2004
- CMPUT 605 Dimensionality Reduction for Text Categorization and Grouping, Fall 2002.
- CMPUT 605 Web Mining: Research and Application Issues, Winter 2002.
- CMPUT 605 Database Security: Issues and Directions, Fall 2001.
- CMPUT 605 Advances in Frequent Pattern Mining, Fall 2000.

- CMPUT 605 Relational Data Visualisation in 3D, Winter 2000.

University of Sydney
- COMP 5318 Machine Learning and Data Mining, 2nd semester 2005.

Chung-Ang University
- Principles of Knowledge Discovery in Data, 1st semester 2006.

6.2 Student Supervision

6.2.1 Graduate Degrees Conferred:
Ph.D. Students
- M-L. Antonie (PhD – September 2008) Title: **Associative Classifiers: Improvements and Potential** (*co-supervised with Dr. Holte*)
- M. El-Hajj (PhD – September 2006) Title: **Frequent Sets by Leap-Traversal for Sequential and Parallel Paradigms** (Co-author of 17 publications) Currently with centre of Health Evidence, University of Alberta
- Stanley Oliveira (Ph.D. – December 2004) Title: **Data Transformation For Privacy-Preserving Data Mining**. (Co-author 0f 10 publications) Currently with Embrapa Information Technology, Campinas, SP, Brazil.

M.Sc. Students
- Sayed Vahid Jazayeri (MSc – September 2008) Title: **Plant Protein Localization Based on Frequent Discriminative Subsequences and Partition-Based Subsequences**
- Yaling Pei (MSc – August 2006) Title: **Discovering and Ranking Outliers in Very Large Datasets** (Co-author of 1 publication)
- Yan Jin (MSc – August 2006) Essay: **Analysis of the State-of-the-Art in Content-Based Video Retrieval**
- Yi Li (MSc – June 2005) Essay: **Investigating Data Mining Tools for Versatile Mining** (Co-author of 1 publication)
- Jiyang Chen (MSc - August 2004) Title: **An Algebra for Visual Web Mining**. (Co-author of 1 publication). Co-supervised with Dr. Goebel. Currently a PhD candidate at the University of Alberta.
- Yang Wang (MSc - August 2004) Title: **EPPdb: a Database for Proteomic Analysis of Extracytosolic Plant Proteins.** (Co-author of 1 publication). Co-supervised with Dr. Goebel. Currently a Ph.D. candidate at Simon Fraser University.
- Lisheng Sun (MSc - July 2004) Title: **FootPath: Web topology and navigation visualization**. (Co-author of 1 publication). Co-supervised with Dr. Goebel. Currently working with Fortinet in Vancouver, BC. Canada.
- Jia Li (MSc - July 2004) Title: **Using Distinct Information Channels for a Hybrid Web Recommender System**. (Co-author of two publications). Currently graduate student.
- Alex Strilets (MSc - June 2003) Essay: **From User Modeling to Reference Feedback: A survey of Information retrieval Techniques for Query Similarities**. (Co-author of 1 publication). Currently a private consultant.

- William Cheung (MSc - December 2002) Title: **Frequent Pattern Mining Without Candidate Generation or Support Constraint** (Co-author of 1 publication). Currently Research Associate, cardiology division, University of Alberta.
- M-L. Antonie (MSc – August 2002). Title: **Categorizing Digital Documents by Associating Content Features** (Co-author of 4 publications). Currently a Ph.D. Candidate at the University of Alberta.
- Andrew Foss (MSc – August 2002). Title: **Automatic Categorical Data Clustering and Spatial Data Clustering by Consecutive Resolution Refinement** (Co-author of 3 publications). Currently a Ph.D. Candidate at the University of Alberta.
- Chihoon Lee (MSc – July 2002) Title: **Density Based Clustering of Spatial Data in the presence of Physical Constraints**. (Co-author of 4 publications). Currently a Ph.D. Candidate at the University of Alberta and at Yahoo.
- Yue Zhang (MSc – July 2002) Title: **On the Use of CBIR in Image Mosaic Generation**. (Co-author of 1 publication). Co-supervised with Dr. Nascimento. Currently a Research Assistant at the Beef Genomics Initiative program, University of Alberta.
- Weinan Wang (MSc - December 2001) Essay: **Experiments with Data Clustering**. (Co-author of 3 publications). First job at Yotta-Yotta in Edmonton, AB, Canada.
- Ayman Ammoura (MSc- July 2001). Title: **Data mining in an Immersed Virtual Environment Over a Network**. (Co-author of 4 publications). Currently a Ph.D. Candidate at the University of Alberta.
- Hang Cui (MSc - June 2001). Title: **Search Engine Result Re-Organization With Ontology**. (Co-author of 1 publication). First Job at IO-Tek Inc. in Edmonton, AB, Canada.
- Jun Luo (MSc - June 2001). Title: **Towards a Flexible Interactive Web Usage Mining System**. (Co-author of 1 publication). Currently an MIS graduate student at the University of Maryland.
- Yuan Ji (MSc - April 2001). Essay: **Virtual Data Warehouse Design and Implementation**. (Co-author of 1 publication). First Job at iKNOWLEDGE Inc. in Edmonton, AB, Canada.

6.2.2 Current Graduate Students under my Supervision:
Ph.D. Students
1. Andrew Foss: Soft Clustering in High Dimensional Spaces - Estimated defence date: August 2009
2. Jiyang Chen: Community Mining in Social Networks (*co-supervised with Dr. Goebel*) - Estimated defence date: August 2009
   M.Sc. Students
3. Amit Satsangi: Contrast Set Mining – Estimated defence August 2009
4. Mojdeh Jalali-Heravi: Feature selection – Estimated defence July 2009
5. Deng Kang: Emerging Sequences - Estimated defence July 2009

6.2.3 Serving as Supervisor on Supervisory Committee for PhD students:
- Greg Lee (Specialization: Machine Learning)
- Chi-Hoon Lee (Specialization: Machine Learning)
- Xiaomeng Wu (Specialization: BioInformatics)
- David Thue (Specialization: Machine Learning)

Serving in the Advisory/Supervisory/Examining Committee for graduate students:

Ph.D. Students

- Gabriella Moise (Examiner and Advisory Committee) **PhD** thesis defence September 18, 2008 Title: Subspace Clustering Methods for High Dimensional Data
- Chedy Raïssi (External) **PhD** thesis defence, University of Montpellier II, <u>France</u>, July 2008, Title: Extraction des séquences fréquents: des bases de données statiques aux flots de données
- Marc Plantevit (External) **PhD** thesis defence, University of Montpellier II, <u>France</u>, July 2008, Title: Extraction de motifs séquentiels dans des données multidimensionnelles
- Ahmed El Sayed (External) **PhD** thesis defence, University of Lyon II, <u>France</u>, April 2008, Title: Contributions in Knowledge Discovery in Textual Data
- Hongqin Fan (Examiner and Advisory Committee) **PhD** Civil Engineering, thesis defence September 5, 2007, Title: Leveraging Operational Data for Intelligent Decision Support in Construction Equipment management
- Pei Sun (External) **PhD** thesis, University of Sydney, <u>Australia</u>, January 2007, Title: Outlier Detection in High Dimensional Spatial and Sequential Data Sets.
- Hellassege Amithalal Caldera (External) **PhD**, University of Western Sydney, <u>Australia</u>, January 2007, Title: Effectively Capturing User Sessions on the Web Using Web Server Logs
- Arnaud Soulet (External) **PhD** thesis defence, University of Caen, <u>France</u>, November 2006, Title: Un cadre générique de découverte de motifs sous contraintes fondées sur des primitives
- Doru Tanasa (External) **PhD** thesis defence, University of Nice-Sophia Antipolis, <u>France</u>, June 2005, title: Web Usage Mining – Contributions to Intersites Logs Preprocessing and Sequential Pattern Extraction with Low Support.
- Xingzhi Sun (External) **PhD** thesis defence, Queensland University, <u>Australia</u>, May 2005, title: Knowledge Discovery in Long Temporal Event Sequences.
- Tong Zheng (Examiner and Advisory Committee) **PhD** thesis defence December 16, 2003 Title: WebFrame: In pursuit of Computationally and Cognitively Efficient Web Mining
- Pablo Figuera (Examiner and Advisory Committee) **PhD** defence November 24, 2003 Title: Retargeting of Virtual Reality Applications
- Mohamed Mamoud Fawzi El-Ramly (Examiner & Advisory Committee) **PhD** defence May 20, 2003, Title: Reverse Engineering Legacy User Interfaces Using Interaction Traces
- Paul A. Ferry (Examiner) **PhD** thesis defence February 15, 2001, Title: Graphics/Data Analysis: Eikon: A Tool for Geometric Coding of Large Multivariate Datasets

M.Sc. Students

- Soner Bekleric (Examiner) MSc Physics, thesis defence November 2007, title: Nonlinear Prediction via Volterra Series and Applications to Geophysical Data
- Patricia Beatty (Examiner) MSc ECE, thesis defence June 2007
- Tarek Sherif (Examiner) MSc, thesis defence May 2007, Title: Substring-Based Transliteration
- Hui Li (Examiner) MSc thesis defence September 8, 2004
  Title: A Similarity Measure for Fuzzy Rulebases Based on Linguistic Gradients

- Greg Lee (Examiner) MSc thesis defence July 21, 2004,
  Title: Automated Action Set Selection in Markov Decision Processes
- Yonghe Niu (Examiner) M.Sc. thesis defence May 9, 2003, Title: Web mining Knowledge
  and Information Visualization (WebKIV)
- Nicole Malloy (Examiner) M.Sc. thesis defence January 4, 2001, Essay:
  Databases/Information Retrieval: (Stemming with Successor Variety - Variations on a
  Theme)
- Shu Lin (Examiner) M.Sc. thesis defence May 19, 2000, Title: Databases/Information
  Retrieval: An Extendible Hashing Structure for Image Similarity Searches

6.2.5 Training of Undergraduate Students:

- Summer 2008 – Julien Baptiste
- Title: **Intelligent Functional Dependency Tutoring System**
- Summer 2004 – Stella Luk
  Title: **Scrutinizing Frequent Pattern Discovery Performance**
- Summer 2003 – Yi Li
  Title: **Implementation of a Test-bed Framework for Association Rule Mining**
- Summer 2002 - Kevin Andrusky (NSERC Undergraduate Summer Scholarship Awardee),
  Title: **eSMART: Didactic On-Line Software and Games for Micromachines**
- Summer 2002 - Dana Mowat, Title: **Implementation of an on-line Faculty
  Bibliographical Database**.
- Summer 2002 - Yaling Pei (NSERC Undergraduate Summer Scholarship Awardee), Title:
  On-line Portal for Data Clustering: Code, Benchmarks, and Datasets.
- Summer 2001 - Kevin Andrusky (NSERC Undergraduate Summer Scholarship Awardee),
  Title: **Educational Software for Micromachines And Related Technologies (eSMART).**

6.3 Departmental and University Responsibilities

- Member of the Campus Saint Jean Council, 2008-2009 (Faculty of Science rep.).
- Member of University Health Informatics Steering Committee, 2008-present.
- Chair of University Health Informatics Graduate Program sub-Committee, 2008-present
- Undergraduate/Curriculum Committee member, 2007-present.
- Computing Science Chair Search Committee, 2008
- Recruiting Committee member, 2007-present.
- External Affairs Committee member responsible for publications and web presence, 2000-
  present
- Graduate Program Committee member, 1999-2003.
- Member of the University E-Learning Plan Committee, 2005 (Faculty of Science rep.).
- Participated in the Faculty of Science IT council, 2005

7. Professional Activities

7.1 Editorial Work

1. Editor-in-Chief, ACM SIGKDD Explorations. ACM Special Interest Group on Knowledge Discovery and Data Mining, ACM Press. (as of 2008).
2. Associate Editor, ACM SIGKDD Explorations. ACM Special Interest Group on Knowledge Discovery and Data Mining, ACM Press. (2004-2007).
3. Associate Editor, Knowledge and Information Systems, An International Journal, by Springer (2006-present)
4. Associate Editor, International Journal of Internet Technology and Secured Transactions (IJITST), Inderscience Publishers, (2005-present)
5. On the editorial board of Journal of Educational Data Mining – on-line journal http://www.educationaldatamining.org (2008-present)
6. Guest Editor, Special Issue on Successful Real-World Data Mining Applications ACM SIGKDD Explorations, June 2006, Volume 8, Issue 1, ACM Press.
7. Guest Editor, Special Issue on Multimedia Data Mining, Journal of Intelligent Information Systems, 19:1, Kluwer Academic Publishers, 2002.

7.2 Steering Committees

1. IEEE International Conference on Data Mining (ICDM) Since 2009
2. International Conference on Advanced Data Mining and Applications (ADMA) Since 2006

7.3 Organization of International Conferences and Workshops

1. [2009] Exhibits and Demos Chair, ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, Paris, France, June 2009
2. [2009] International co-Chair, International Conference on Computational Aspects of Social Networks (CASoN), Fontainebleau, France, June 2009.
3. [2009] Track co-Chair, Data Mining Track at the ACM Symposium on Applied Computing (ACM SAC'09), Honolulu, Hawaii, USA, March 8 - 12, 2009
4. [2008] Honorary General Chair, EGC: Extraction et Gestion des Connaissances, January 29 - February 1st, 2008, Sophia Antipolis, France
5. [2008] Registration Chair, ACM SIGMOD/PODS International Conference on Management of Data and Symposium on Principles of Database Systems, June 9-12, 2008, Vancouver British Columbia, Canada
6. [2008] Area Chair, ECML/PKDD Conference - The 19th European Conference on Machine Learning, and The 12th European Conference on Principles and Practice of Knowledge Discovery in Databases, September 15-19, 2008, Antwerp, Belgium
7. [2008] Track co-Chair, Data Mining Track at the ACM Symposium on Applied Computing (ACM SAC'08), Fortaleza, Brazil, March 16-20, 2008
8. [2008] Co-Chair, Tenth WEBKDD International Workshop: Web Mining and Web usage Analysis, in conjunction with KDD-2008: 14th ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, August 24, 2008, Las Vegas, Nevada, USA.

9. [2007] Program co-Chair, IEEE International Conference on Data Mining (ICDM), October 28-31, 2007, Omaha, Nebraska, USA

10. [2007] General co-Chair, Third International Conference on Advanced Data Mining and Applications (ADMA), August 13-15, 2007, Harbin, China

11. [2006] Tutorials co-Chair, 10th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2006), Singapore, 9-12 April 2006.

12. [2006] Program co-Chair, Second International Conference on Advanced Data Mining and Applications (ADMA), August 14-16, 2006, Xi'an, China

13. [2005] Co-Chair, Seventh WEBKDD International Workshop: Taming Evolving, Expanding and Multi-Faceted Web Clickstreams, in conjunction with KDD-2005: Eleventh ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, August 21, 2005, Chicago, IL, USA.

14. [2005] Sponsorship Chair SIAM International Conference on Data Mining, Newport Beach, CA, USA, April 21-23, 2005

15. [2005] General Chair - North America, Third International Human.Society@Internet Conference, July 27-29, 2005, Tokyo, Japan

16. [2003] Co-Chair, Fifth WEBKDD International Workshop: Web Mining as a Premise to Effective and Intelligent Web Applications, in conjunction with KDD-2003: Ninth ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, August 24, 2003, Washington, DC, USA

17. [2003] General Chair - North America, Second International Human.Society@Internet Conference, June 18-20, 2003, Seoul, Korea

18. [2003] Publicity Chair, Ninth ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, August 24-27, 2003, Washington, DC, USA

19. [2003] Webmaster, Ninth ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, August 24-27, 2003, Washington, DC, USA

20. [2002] Publicity Chair, Eighth ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, July 23-26, 2002, Edmonton, Alberta, Canada

21. [2002] Proceedings Chair, Eighth ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, July 23-26, 2002, Edmonton, Alberta, Canada

22. [2002] Webmaster, Eighth ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, July 23-26, 2002, Edmonton, Alberta, Canada

23. [2002] Local Arrangement Chair, Sixth International Database Engineering and Applications Symposium (IDEAS'02), July 17-19, 2002, Edmonton, Alberta, Canada

24. [2002] Co-Chair, Third International Workshop on Multimedia Data Mining (MDM/KDD2002) in conjunction with KDD-2002: Eighth ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, July 22, 2002, Edmonton, Alberta, Canada

25. [2002] Co-Chair, Fourth WEBKDD International Workshop: Web Mining for Usage Patterns and User Profiles in conjunction with KDD-2002: Eighth ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, July 22, 2002, Edmonton, Alberta, Canada

26. [2002] Co-Chair, International Workshop on Knowledge Discovery in Multimedia and Complex Data (KDMCD'02) in conjunction with PAKDD-2002: 6th Pacific-Asia Conference on Knowledge Discovery and Data Mining, May 6, 2002, Taipei, Taiwan

27. [2001] Co-Chair, Second International Workshop on Multimedia Data Mining (MDM/KDD2001) in conjunction with KDD-2001: Seventh ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, August 26-29, 2001, San Francisco, CA, USA
28. [2000] Co-Chair, Workshop on Multimedia Data Mining (MDM/KDD2000) in conjunction with KDD-2000: Sixth ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, August 20-23, 2000, Boston, MA, USA

7.4 Serving on Program Committees of International Conferences and Workshops since the year 2000

7.4.1 Top tier international conferences:
1. The 26th International Conference on Data Engineering, March 1-6, 2010, Long Beach, California
2. 15th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD'09), Paris, France, June 28- July 1st, 2009.
3. 8th IEEE International Conference in Data Mining (ICDM'08), Pisa, Italy, December 15-19, 2008.
4. Seventeenth ACM Conference on Information and Knowledge Management (CIKM'08), Napa Valley, California, USA, October 26-30, 2008.
5. Fourteenth ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD'08), Las Vegas, USA, August 24-27, 2008.
6. Thirteenth ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD'07), San Jose, USA, August 12-15, 2007.
7. 6th IEEE International Conference on Data Mining (ICDM), Hong Kong, December 18-22, 2006.
8. The Twelfth ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, August 20-23, 2006, Philadelphia, USA
9. ACM 15th Conference on Information and Knowledge Management (CIKM-2006), Arlington, VA, USA, November 6-11, 2006
10. Data Mining track of the Fifteenth Int'l World Wide Web Conference (WWW'06), Edinburgh, Scotland, May 22-26, 2006.
11. The Fifth IEEE International Conference on Data Mining, New Orleans, Louisiana, USA, November 26 - 30, 2005
12. The Eleventh ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, Chicago, IL, USA, August 21-24, 2005
13. 4th IEEE International Conference of Data Mining (ICDM 2004), Brighton, UK, 1 - 4 November, 2004
14. 10th ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, Seattle, Washington, USA, August 22-25, 2004
15. 9th ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, Washington DC, USA, August 24-27, 2003
16. Third IEEE International Conference on Data Mining (ICDM'03), November 19-22, 2003, Melbourne, Florida, USA
17. Second IEEE International Conference on Data Mining (ICDM'02), Maebashi City, Japan, December 9-12, 2002,

18. First IEEE International Conference on Data Mining (ICDM '01), November 29 - December 2, 2001, in Silicon Valley, California.

7.4.2 Other international conferences and workshops:
19. Workshop Clustering and Outlier Detection in High-Dimensional Data, held in conjunction with the 13th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD'09), 27 April 2009, in Bangkok, Thailand.
20. First International Conference on Educational Data Mining (EDM'08), Montreal, Canada, June 20-21, 2008.
21. International Conference on Advanced Intelligence (ICAI'08), Beijing, China, October 19-22, 2008.
22. 19th International Database and Expert Systems Applications (DEXA'08), Turino, Italy, Sept 1 - 5, 2008
23. IEEE Workshop of Data Mining in Medicine in conjunction with the IEEE International Conference in Data Mining (ICDM'07), Omaha, NB, October 31, 2007.
24. Eighth WebKDD workshop: Web Mining and Web Usage Analysis (WebKDD 2006), in conjunction with the 12th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2006) August 20, 2006, Philadelphia, Pennsylvania
25. The International Conference on Signal-Image Technology and Internet-Based Systems (SITIS'06) track on Web-based Information Technologies and Distributed Systems, Hammamet, Tunisia, December 17-21, 2006
26. Eighth Asia Pacific Web Conference (APweb'06), Harbin, China, January 16-18, 2006.
27. IEEE International Conference on Signal-Image Technology & Internet-Based Systems (SITIS'05), Yaoundé, Cameroon, November 27th - December 2nd, 2005
28. The first international workshop on mining complex data 2005 (IEEE MCD'05), New Orleans, Louisiana, USA November 27, 2005.
29. International Conference on Machine Intelligence(ACIDCA-ICMI 2005), Tozeur, Tunisia, November 5-7, 2005.
30. International Conference on Advanced Data Mining and Applications (ADMA 2005), Wuhan, China, July 22-24, 2005.
31. 3rd International Workshop on Biological Data Management (BIDM 2005), in conjunction with DEXA 2005, Copenhagen, Denmark, August 22-26, 2005
32. The Australasian Data Mining Conference(AusDM2004), Cairns, Queensland, Australia, December 6, 2004
33. Data Mining Track in the ACM 20th Symposium on Applied Computing (ACM SAC 2005), Santa Fe, New Mexico, USA, on March 13-17, 2005
34. Sixth WebKDD workshop: Web Mining and Web Usage Analysis (WebKDD 2004), in conjunction with the 10th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2004), Seattle, Washington, USA, August 22-25, 2004.
35. 8th European Conference on Principles and Practice of Knowledge Discovery in Databases (PKDD 2004), Pisa, Italy, September 20-24, 2004
36. XIX Brazilian Symposium on Databases (SBBD 2004), Brasilia, Brazil, October 18-20, 2004
37. 2nd International Workshop on Biological Data Management (BIDM 2004), in conjunction with DEXA 2004, Zaragoza, Spain, August 30-September 3, 2004

38. First Computer Vision meets Databases Workshop (CVDB 2004), in conjunction with ACM SIGMOD, Paris, France, June 18, 2004
39. Fifth International Conferences on Web Information Systems Engineering (WISE 2004), Brisbane, Australia, November 22-24, 2004
40. ESA-EUSC 2004: Theory and Applications of Knowledge driven Image Information Mining, with focus on Earth Observation, Madrid, Spain, March 2004
41. The Australasian Data Mining Workshop, Canberra, Australia, December 8, 2003
42. 4th SIAM International Conference on Data Mining, Kissimmee, Florida, USA, April 22-24, 2004
43. Data Mining Track in the ACM 19th Symposium on Applied Computing (ACM SAC 2004), Nicosia, Cyprus, on March 14-17, 2004
44. European Web Mining Forum Workshop at ECML/PKDD-2003, Cavtat-Dubrovnik, Croatia, 22nd September 2003
45. International Workshop on XML Schema and Data Management (XSDM'03), in conjunction with the 22nd International Conference on Conceptual Modeling, Chicago, USA, 13th October, 2003
46. 4th International Conference on Web Information System Engineering (WISE 2003), Rome, Italy, December 10-13, 2003
47. 3rd Workshop on Databases in Networked Information Systems, University of Aizu, Japan, September 22-24, 2003
48. The 8th International Conference on Database Systems for Advanced Applications (DASFAA'03), May 26-28, 2003, Kyoto, Japan
49. 3rd SIAM International Conference on Data Mining, San Francisco, May 1 - 3, 2003
50. 3rd International Conference on Web Information Systems Engineering (WISE'2002), Singapore, December 11 - 14, 2002
51. Sixth International Database Engineering and Applications Symposium (IDEAS'02), Edmonton, Alberta, Canada, July 17-19, 2002.
52. Workshop on Mining Customer Data Across Multiple Touch Points for CRM, in conjunction with 2002 Pacific Asia Knowledge Discovery in Databases, (PAKDD-02), Taipei, Taiwan, May 6, 2002.
53. 6th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD-02), Taipei, Taiwan, May 6-8, 2002.
54. Workshop on Multimedia Data and Document Engineering (MDDE), in conjunction with the 8th International Conference on Extending Database Technology (EDBT'2002), Prague, Czech Republic, March 25-27, 2002.
55. Workshop on Web Analytics, in conjunction with the 2nd SIAM Data Mining Conference, Arlington, VA, USA, April, 2002.
56. Second International SIAM Data Mining Conference, Crystal City, Arlington, VA, USA, April 11-13, 2002.
57. Visual Data Mining Workshop, in conjunction with the 5th European Conference on Principles and Practice of Knowledge Discovery in Databases (PKDD'01), Freiburg, Germany, September 3-7, 2001.
58. Third WEBKDD workshop on data mining for web applications, in conjunction with Seventh ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, San Francisco, CA, USA, August 26-29, 2001.

59. IASTED International Conference on Computers and Advanced Technology in Education (CATE-2001), Banff, Canada from June 27-29, 2001.
60. Third Multimedia Information Retrieval (MIR) Workshop, in conjunction with ACM Multimedia Conference, Ottawa, Canada, Oct 5 and 6, 2001.
61. SBBD 2001 - XVI Brazilian Symposium on Databases in cooperation with ACM SIGMOD, Rio de Janeiro, Brazil, October 1 - 3, 2001.
62. Web Mining Workshop in conjunction with the SIAM International Conference on Data Mining, SDM 2001, Chicago, Illinois on April 7, 2001.
63. Pacific Asia Knowledge Discovery and Data Mining (PAKDD-01), Hong Kong, April 16, 2001.
64. International Workshop on Data Mining and Electronic Business: Practice and Experience (DaMeB2001) in conjunction with PAKDD'2001, Hong Kong on April 16-18.
65. IS2000 Special Session on Knowledge discovery in multimedia databases, Fukushima, Japan, November 5-8, 2000.
66. Sixth International Workshop on Multimedia Information Systems (MIS'2000), Chicago, USA, October 26-28, 2000.
67. International Workshop on the World Wide Web Semantics (WebSem 2000) in conjunction with International Conference Web Information Systems Engineering (WISE2000), Hong Kong, June 19-20, 2000.

7.5 Reviewing Journal Paper

- ACM Transactions on Knowledge Discovery from Data (TKDD)
- IEEE Transaction on Knowledge and Data Engineering (TKDE)
- Distributed and Parallel Databases: An International Journal, Kluwer Academic Publisher
- Data Mining and Knowledge Discovery Journal, Kluwer Academic Publisher
- Distributed and Parallel Databases: An International Journal, Kluwer Academic Publisher- special issue on Parallel and Distributed Data Mining
- Knowledge and Information Systems, and International Journal, Springer Verlag.
- INFORMS Journal on Computing (Institute for Operations Research and the Management Sciences) Special Issue on Mining Web-based Data for e-Business Applications
- Journal on Data and Knowledge Engineering, special issue on Web Mining and warehousing.
- Computational Intelligence: An International Journal, Blackwell Publishers.
- The International Journal on Very Large Data Bases, Springer Verlag.
- Communications of the ACM
- ACM Computing Surveys

7.6 Reviewing Research Grant Applications for Funding Agencies

- NSF, National Science Foundation, USA, international research fellowship program.
- NSERC, Natural Sciences and Engineering Research Council of Canada, Reviewed proposals from the Supplemental Strategic Grant Program, 2007 (Selection Committee member for the Advanced Communications and Management of Information program)

- FQRNT, Fonds Québécois de la Recherche sur la Nature et les Technologies, Program Projet de recherche en équipe, 2007 (Selection Committee member)
- NSERC, Natural Sciences and Engineering Research Council of Canada, Reviewed proposals from the Discovery Grant Program, 2003, 2004 and 2005.
- The Research Council of Norway, Reviewed a proposal from the Division of Science and Technology, 2003
- NSERC, Natural Sciences and Engineering Research Council of Canada, Reviewed proposal from the Collaborative Health Research Projects Program, 2003
- NSERC, Natural Sciences and Engineering Research Council of Canada, Reviewed proposals from the Research Partnerships Program, 2002, 2003
- Research proposal from the National University of Singapore, 2001
- NSF, US National Science Foundation, reviewed research proposals submitted to the Data Mining Panel, 1998.
- Invited by US-National Science Foundation to evaluate proposals submitted to the Information and Intelligent Systems Division, 2000, 2001.
- Presented before the NSERC External Panel evaluating Phase II of the TeleLearning NCE, Vancouver, February 2001.

7.7 Reviewing Books for Publishers

- Review of "Java Data Mining: Strategy, Standard and Practice" 2nd edition by Mark Hornick, Sunil Venkayala and Erik Marcade for Morgan Kaufmann Publishers, 2007.
- Review of "Data Mining, Concepts and Techniques" 2nd edition by J. Han and M. Kamber for Morgan Kaufmann Publishers, 2005.
- Review of "Fundamentals of Multimedia" by Ze-Nian Li and Mark Drew for Prentice Hall Publishers, 2003
- Evaluation of one book proposal for Morgan Kaufmann Publishers, 2002.
- Review of "Data Mining, Concepts and Techniques" by J. Han and M. Kamber for Morgan Kaufmann Publishers, 2000.

7.8 Member of Professional Societies

3. Association for Computing Machinery (ACM) since 1986
4. IEEE Computer Society (IEEE/CS) since 1987
5. ACM Special Interest Group on Management of Data (SIGMOD)
6. ACM Special Interest Group on Knowledge Discovery and Data Mining (SIGKDD)
7. American Association for Artificial Intelligence (AAAI)