

CURRICULUM VITAE

MATWIN, Stan

Career Highlights:

Stan Matwin is a Canada Research Chair (Tier 1) and Professor in the Faculty of Computer Science, Dalhousie University. Currently on leave from the School of Electrical Engineering and Computer Science at, University of Ottawa, where he is a Distinguished University Professor.. His research is in machine learning, data mining, text mining, and their applications. Author and co-author of 250 research papers, Stan has worked at universities in Canada, the U.S, Europe, and Latin America. Former president of the Canadian Artificial Intelligence Society (CSCSI) and of the IFIP Working Group 12.2 (Machine Learning). Founding Director of the Graduate Certificate in Electronic Commerce at University of Ottawa, former Chair of the NSERC Grant Selection Committee for Computer Science, and member of the Board of Management of the Centre of Excellence for Communications and Information Technology. Fellow of the European Coordinating Committee for Artificial Intelligence. Fellow and recipient of the Distinguished Service Award of the Canadian Artificial Intelligence Society. Recipient of the CITO Champion of Innovation Award. Program Committee Chair and Area Chair for a number of international conferences in AI and Machine Learning. Served as a member of the Editorial Boards of the leading journals in his field. One of the founders of Distil Interactive Inc. and Devera Logic Inc., Stan Matwin has significant experience and interest in innovation and technology transfer.

Full Professor, tenured

Member of the Faculty of Graduate and Postdoctoral Studies, University of Ottawa

Foreign Professor, Institute of Computer Science, Polish Academy of Sciences, Warsaw, Poland

DEGREES: designation, institution, department, year

State Professorship, Republic of Poland, 2012

Distinguished University Professor, University of Ottawa, 2011

D.Sc. (Habilitation), Polish Academy of Sciences, Institute of Computer Science, 2010

Ph.D., Warsaw University, Department of Computer Science, 1977.

M.Sc., Warsaw University, Department of Computer Science, 1972.

EMPLOYMENT HISTORY: dates, rank/position, department, institution/firm

January, 2013	Canada Research Chair (Tier 1) in Visual Text Analytics and tenured Full Professor, Dalhousie University
August 1992- June 2011	Tenured Full Professor, University of Ottawa Visiting Professor, Erasmus Mundus Masters in Data Mining and Knowledge Management, Universita Politecnica de Catalunya
Mar. – Apr. 2010	Visiting Professor, Università delli Studi di Bari, Dipartimento di Informatica
Sep. 2008 – Aug. 2009	Visiting Professor, L'Institut d'Investigació en Intelligència Artificial (IIIA) Consejo Superior de Investigaciones Científicas (CSIC), Barcelona, Catalunya, Spain
2006 -	Adjunct Research professor, Institute of Cognitive Science, Carleton University

November 2004 –	Foreign Professor, Institute in Computer Science, Polish Academy of Sciences
Aug. 2001-Mar. 2002	Visiting professor, Université de Paris XI, Laboratoire de recherché en informatique (LRI)
April 2002-May2002	Visiting professor, Université de Paris VI, Laboratoire d’informatique de Paris 6 (LIP6)
July 2000-July 2001	Director, Graduate Certificate in Electronic Commerce, University of Ottawa
July 1998-June 2000	Director, Ottawa-Carleton Institute for Computer Science
May 97-	Director, Graduate Studies in Computer Science, School of Information Technology and Engineering
July 1996-	Adjunct Research Professor, Institute for Interdisciplinary Studies: Cognitive Science, Carleton University
July 1996-May 1997	Associate Chair (Graduate Studies), Department of Computer Science, University of Ottawa
February-April 1995	UNESCO Distinguished Lecturer in Science and Sustainable Development, Universidad de Sao Paulo, ICMSC , Brazil
October-November 91	Visiting scientist, AI Branch, NASA Ames Research Center, Mountain View, California.
May 91-	Professor, Department of Computer Science, University of Ottawa, Director of the Ottawa Machine Learning Group.
January 88-June 88	Visiting Professor, Department of Computer Science, George Mason University, Fairfax, Virginia; member of Machine Learning and Inference Group.
May 1984-May 1991	Associate Professor, Department of Computer Science, University of Ottawa.
Sept. 1981-	Assistant Professor, Department of Computer Science, University of Ottawa.
Jan. 1982-May 83	Part time lecturer, Certificat d’Informatique, Université du Québec à Hull.
Sept. 1980-Sept. 1981	Assistant Professor, School of Computer Science, Acadia University, Nova Scotia.
May 1980-Sept.1980	Lecturer, Department of Computer Science, York University, Toronto.
July 1979-Aug. 80	Assistant Professor, Department of Computer Science, University of Guelph, Ontario.
Sept. 1975-July 1979	Assistant Professor, Department of Computer Science, Warsaw University, Warsaw, Poland.

SCHOLARLY AND PROFESSIONAL ACTIVITIES

Editorial Boards:

2012 -	Member, Editorial Board, Journal of Intelligent Information Systems (Springer)
2010 -	Member, Editorial Board, International Journal of Social Network Mining (IJSNM)
2005- 2006	Member, Editorial Board, Journal of Artificial Intelligence Research (THE premier Artificial Intelligence journal)
2003-	Member, Editorial Board, Computational Intelligence Journal
2002-2007	Member, Editorial Board, Machine Learning Journal
2003-	Member, Editorial Board, Intelligent Data Analysis Journal

1990-1994 Member and Chair, Editorial Board, IEEE Expert

Awards:

2012 Distinguished University professor / Professeur éminent de l'université, University of Ottawa
2011 CASCON Ten Years Most Influential Paper Award
2011 Fellow, European Coordinating Committee for Artificial Intelligence
2011 Fellow, Canadian Artificial Intelligence Society
2011 George S. Glinski Award for Excellence in Research, University of Ottawa, Faculty of Engineering
2010 Distinguished Service Award of the Canadian Artificial Intelligence Society
2003 Champion of Innovation, Communications and Information Technology Ontario
1995 UNESCO Distinguished Lecturer in Science and Engineering, University of Sao Paulo, Brazil

Grant selection Panels, Boards of Directors:

2012 Member, Scientific Advisory Council, Southern Ontario Computing Innovation Platform Consortium
2010 Member, Scientific Steering Committee, Polish Association for Artificial Intelligence (PSSI)
2010 Member, Evaluation Group 1507 (Computer Science), Natural Sciences and Engineering Research Council
2007-2009 Reviewer, Future Information Technologies Program/FET7, Information Society Technologies, European Commission.
2004-2005 Chair, Grant Selection Committee for Computer Science B, Natural Sciences and Engineering Research Council
2003 - Member, College of Reviewers, NSERC Special Research Opportunities program
2003 Member, National Science Foundation Panel on Creating New capabilities in Learning from Data (ITR)
2003-2004 Chair, Research Tools and Instruments Committee (Computer Science), Natural Sciences and Engineering Research Council
2002- Director, Information Technology Cluster, Ontario Research Network on Electronic Commerce
2002-2005 Member, Grant Selection Committee 331 (Computer Science), Natural Sciences and Engineering Research Council
2002- Member, Board of Directors, Communications and Information Technology Ontario (Division of the Ontario Centers of Excellence)
2001- Member, College of Reviewers, Canada Research Chairs Program
1997 Member, NSERC Selection Committee for the Ph.D. Dissertation Prize in Sciences and Engineering
1990-94 Member and Chair, Editorial Board, IEEE EXPERT

Program Committees (since 1998):

2013 Member, program Committee, IML, Atlanta, GA, July 2013
2013 Member, Program Committee, American Association for Artificial Intelligence (AAAI), Bellevue, WA, July 2013

- 2013 Member, Program Committee, Canadian AI Conference, Regina, Canada, May 2013
- 2012 Member, Program Committee, Workshop on New Methods for Mining Complex Patterns, ECML 2012, Bristol, UK
- 2012 Member, Program Committee, Canadian Artificial Intelligence Conference, Toronto, 2012.
- 2012 Member, Program Committee, International Workshop on Mining Social Network Dynamics, Lyon, France, 2012.
- 2012 Member, Program Committee, Conférence d'apprentissage (Cap), Nancy, France, 2012.
- 2012 Member, Program Committee, AI and Web Track, Toronto, AAAI 2012.
- 2012 Member, Program Committee, International Conference on Machine Learning (ICML), Edinburgh, Scotland, 2012.
- 2012 Member, Program Committee, ECML PKDD, Bristol England, 2012.
- 2012 Member, Program Committee, Workshop on Class Imbalance: Past, Present and Future, ICML 2012, Bristol.
- 2012 Member, Program Committee, Mining Complex and Stream Data in ADBIS, Poznan, 2012.
- 2012 Member, Program Committee, Conference d'Extraction et Gestion des Connaissances 2012, Bordeaux, France, 2012.
- 2011 Member, Program Committee, International Conference on Man-Machine Interactions 2011, The Beskids, Poland, October 2011
- 2011 Area Chair, ECML/PKDD 2011, Athens, Greece, September 2011
- 2011 Member, Program Committee, 20th ACM Conference of Information and Knowledge Management (CIKM 2011), Glasgow, August 2011
- 2011 Member, Program Committee, 23rd Int'l Conference on Inductive Logic Programming, UK, August 2011
- 2011 Member, Program Committee, American Association for Artificial Intelligence, San Francisco, August 2011
- 2011 Member, Program Committee, International Conference on Machine Learning, Bellvue, WA. July 2011
- 2011 Member, Program Committee, Conférence d'apprentissage (Cap 2011), Chambéry, France, May 2011
- 2010 Member, Program Committee, International Conference on Data Mining, Sydney, Australia, December 2010
- 2010 Member, Program Committee, Discovery Science 2010, Canberra, Australia, 2010
- 2010 Member, Program Committee, Conférence d'apprentissage (Cap 2010), Clermont-Ferrand, France, May, 2010
- 2010 Member, Program Committee, ECML/PKDD 2010, Barcelona, Spain, Sep. 2010
- 2010 Member, Program Committee, International Conference on Rough Sets and Current Trends in Computing (RSCTC 2010), Warsaw, Poland, June 2010
- 2010 Member, Program Committee, Inductive Logic Programming 2010, Florence, Italy, June 2010
- 2010 Member, Program Committee, European Conference on AI, Lisbon, Portugal, August 2010
- 2010 Member, Program Committee, Brazilian Symposium on Artificial Intelligence SBIA 2010, São Bernardo do Campo – Brazil, Oct. 2010
- 2009 Member, Program Committee, CAEPIA 2009 (Spanish Artificial Intelligence Society Conference), Seville, November 2009
- 2009 Member, Program Committee, Inductive Logic Programming, Paris, July 2009
- 2009 Area Chair, ECML/PKDD 2009, Bled, Slovenia, Sep. 2009

- 2009 Member, Program Committee, Computer Linguistic Applications, Mragowo, Poland, October, 2009
- 2009 Member, Program Committee, SIGKDD 2009, Paris, July 2009.
- 2008 Member, Program Committee, SBIA 2008, 19th Brazilian Symposium on Artificial Intelligence, Salvador, October 2008
- 2008 Member, Program Committee, 18th International conference on Inductive Logic Programming, Prague, September 2008
- 2008 Member, Program Committee, European Conference on Machine Learning and European Conference on Principles and practice of Knowledge Discovery in Databases, Antwerp, September 2008
- 2008 Member, Program Committee, Feature Selection in Data Mining and Knowledge Discovery (FSDM08), Antwerp, September 2008
- 2008 Member, Program Committee KDD 2008, 14th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, Las Vegas, August 2008
- 2008 Member, Program Committee, 2nd ACM SIGKDD International Workshop on Privacy, Security, and Trust in KDD, Las Vegas, August 2008
- 2007 Co-Chair, Program Committee, European Conference on Machine Learning and Principles of Discovery in Databases, Warsaw, Poland, 2007
- 2006 Area Chair, European Conference on Machine Learning/Principles of Knowledge Discovery in Databases, Berlin, 2006
- 2006 Program Committee, International Conference on Machine Learning, Pittsburgh, PA, 2006
- 2006 Program Committee, International Conference on Data Mining, Hong Kong, 2006
- 2006 Program Committee, International Workshop on Privacy Aspects of Data Mining, Hong Kong, 2006
- 2006 Program Committee, European Conference on AI, Trentino, Italy, 2006
- 2006 Program Committee, ACM Conference on Information and Knowledge Management,
- 2005 Member, Program Committee, American Association for Artificial Intelligence, Pittsburgh, PA, 2005
- 2005 Member, Program Committee, Artificial Intelligence 2005, Annual Conference of the Canadian Society for the Computational Studies of Intelligence, Victoria 2005
- 2005 Member, Program Committee, 22nd International Conference on Machine Learning, Bonn, Germany
- 2005 Member, Program Committee, International Conference on Inductive Logic Programming, Bonn
- 2005 Member, Program Committee, International Workshop on Feature Selection for Data Mining, Newport Beach, CA.
- 2005 Member, Program Committee, International Symposium on Methodologies for Intelligence Systems, Saratoga Springs, NY.
- 2005 Member, Advisory Board, Tenth International Conference on Rough Sets, Fuzzy Sets, Data Mining, and Granular Computing (RSFDGrC 2005).
- 2004 Co-Chair, Predictive Software Models Workshop, Software Technology and Engineering Practice, Chicago 2004
- 2005 Member, Program Committee, AAI 2005
- 2004 Workshop Chair, International Conference on Data Mining, Bristol, UK
- 2004 Member, Program Committee, 21st International Conference on Machine Learning, Banff, Canada
- 2004 Member, Program Committee, European Conference on Machine Learning, Pisa, Italy
- 2004 Member, Program Committee, Principles of Knowledge Discovery in Databases, Pisa, Italy

- 2004 Member, Program Committee, Artificial Intelligence 2004, Annual Conference of the Canadian Society for the Computational Studies of Intelligence, London 2004
- 2003 Editor, Special Issue of Machine Learning journal on Inductive Logic Programming
- 2003/04 Member of the Board of Directors, Communications and Information Technology Ontario
- 2003 Membre, Comité de programme, Conférence d'apprentissage, plateforme Association française d'intelligence artificielle, Laval
- 2004 Area Chair, 20th International Conference on Machine Learning, Washington, D.C.
- 2003 Member, Program Committee, European Conference on Machine Learning, Dubrovnik, Croatia
- 2003 Member, Program Committee, Principles of Knowledge Discovery in Databases, Dubrovnik, Croatia,
- 2004 Member, Program Committee, International Symposium on Methodologies for Intelligence Systems, Maebashi City, Japan
- 2003 Member, Program Committee, International Conference on Inductive Logic Programming, Szeged, Hungary
- 2002. Program Committee co-Chair, Inductive Logic Programming Workshop, Sydney, 2002
- 2002. Member, Program Committee, IEEE Conference on Knowledge Discovery in Databases
- 2002. Member, Program Committee, International Conference on Principles of Knowledge Discovery in Databases, Helsinki
- 2002. Member, Program Committee, International Symposium on the Methodologies for Intelligent Systems, Lyon, France
- 2002 Member, Program Committee, European Conference on Machine Learning, Helsinki
- 2001 Area Chair, International Conference on Machine Learning 2001
- 2001 Member, Program Committee, Inductive Logic Programming Conference 2001
- 2001 Member, Program Committee, European Conference on Machine Learning, Freiburg, 2001
- 2001 Member, Program Committee, Principles of Knowledge Discovery in Databases, Freiburg, 2001
- 2001 Membre, Comité du programme, Conférence d'apprentissage, Grenoble 2001.
- 2001 Program Committee co-Chair, AI-2001, Ottawa
- 2000 Member, Program Committee, European Conference on Machine Learning 2000, Barcelona, Spain
- 2000 Member, Program Committee, AI2000, Montreal, Canada
- 2000 Member, Program Committee, Inductive Logic Programming Conference, London, UK.
- 1999 Member, Program Committee, PACLING 98, Waterloo, Canada
- 1999 Member, Program Committee, International Conference on Machine Learning, Bled, Slovenia
- 1999 Member, Program Committee, Inductive Logic Programming Workshop, Bled, Slovenia
- 1998 Member, Program Committee, European Conference on Machine Learning, Chemnitz, Germany

Referee for:

IEEE PAMI, IEEE SMC, Machine Learning, IEEE TKDE, IEEE Expert, IJCAI, AAI, ECML, NSERC, NSF, FCAR

Member of the Senate, University of Ottawa, 1999-2000
Member of Promotion and Tenure Committees, departmental and faculty level, 1993-1996,
1997-2001, 2002-2005

GRADUATE SUPERVISIONS: career number - M/D; completed/in progress

Career Number:

Completed:	25 M.Sc.,	16 Ph.D.	7 Post-Doc
In progress:	2 M.Sc.,	9 Ph.D	

GRADUATE STUDENTS - Completed their degrees (includes Post-doctoral fellows)

1. Kambiz Ghazinour, Post-doctoral Fellow, 2012 –
2. Vera Sazonova, Post-doctoral Fellow, 2012-
3. Yasser Jaffar, PhD, topic TBD, co-supervised with Marina Sokolova
4. Amir Hossein Razavi, Ph.D., 2006-2012, Automatic Text Ontological Representation and Classification via Fundamental to Specific Conceptual Elements
5. William Klement, Ph.D., 2004-2010, Evaluating Machine Learning Methods: scored Receiver Operating Characteristics (sROC) Curves, co-supervised with N. Japkowicz
6. M. Zhilin, Ph.D., 2004-2010, Annotation Concept Synthesis and Enrichment Analysis: A Logic-based Approach to the Interpretation of High-throughput Biological Experiments, co-supervised with M. Turcotte
7. Marcelo Keese Albertini, “sandwich” PhD student from USP, Brazil, 2010, Mining high-dimensional Temporal Data
8. Francesc Massanes, Feb. – Aug. 2009, M.Sc. student at Universita Polytecnica de Catalunya, co-supervised with Dr. Josep Larriba Pey
9. Luc Beaudoin, MSS, 2005-2009, Autonomous Computer Network Defence Using Reinforcement Learning, graduated Feb. 2009
10. Huang, Jin, Post Doc, 2007-2009, Machine Learning with Insufficient Training Sets
11. Su, Jiang, Post Doc (NSERC PDF), 2007-2009, Active Learning, Instance Selection, Bayesian Learning, semi-supervised learning
12. Kouznetsov, A., Post Doc, Machine Learning from Text Data, medical applications, text mining (2007-2009)
13. Sayyad Shirabad, Jelber, Post-doc, 2004-2004, Semi-supervised learning, Active Learning, Instance selection, Data mining in software engineering.
14. Caropreso, Fernanda, Ph.D., Extending the Bag of Words Representation for Text Classification, 2002-2008, graduated May 2008
15. Nadeau, David, Ph.D., Semi-Supervised Named Entity Recognition: Learning to Recognize 100 Entity Types with Little Supervision, 2004-2007, graduated November 2007 (co-supervised with P. Turney)
16. Ma, Yimin, MCS, Active Learning in Information Extraction, 2004 – 2007, graduated Oct. 2007.
17. Zhan, Justin, Ph.D., Privacy-preserving Collaborative Data Mining, 2003-2006, graduated in Aug, 2006
18. Mucsi-Nagy, Agnes, MCS, Digital Fingerprinting for sharing of Confidential Data, 2003-2006, graduated in Aug. 2006.
19. Dufay, Guillaume, Post Doc. Formal Methods in Application-Centric Privacy, 2004-2005

20. Hernadvolgyi, Istvan, Post Doc, Theorem Proving for Data Privacy Applications, 2004-2005
21. Ziyang Liu, MSS, Data Mining to Identify Gene Regulatory Networks in Time Series Gene Expression Data, 2002-2006, graduated in Feb. 2007.
22. Kiritchenko, Svetlana, Ph.D., Text Classification with Hierarchical Categories, 2001-2006
23. Armour, Quintin, M.C.S. Named Entity in Text classification (co-supervision with dr. Japkowicz), 2003-2005
24. Rong Tang, MCS, Transaction Models in Peer-to-Peer Databases, (co-supervised with Dr. Kiringa), 2003-2005
25. Souza, Jeffreson, Ph. D., A Hybrid Feature Selection Algorithm, first registration 2000, graduated in 2004
26. Alphonse, Erick, Ph.D., Literal Selection in ILP, 2000-2003
27. Zaluski, M., MCS, Case-based Knowledge Acquisition from Text, first registration 1999, graduated in 2004
28. Widlak, Magda, Effect of Word Sense Disambiguation on the Performance of Text Classification, M.Sc, first registration 1999, graduated in 2003
29. Drummond, Chris, Post Doc., Learning with the use of Background Knowledge, 1999 - 2002
30. Letourneau, Sylvain Ph. D., An Interactive Method for The Analysis and Removal of Attribute Dependencies in Data Mining, first registration 1998, graduated in 2003
31. Sayyad Shirabad, Jelber, Ph.D., Data Mining in Support of Software Maintenance Activities, first registration 1997, graduated in 2003
32. Morin, Johanne, Ph.D., Learning Relational Clichés, first registration 1993, graduated 1999.
33. Ouerd, Messaouda, Ph.D., Learning in belief networks and its application to distributed databases. First registration 1993, graduated 2000, joint supervision with Dr. J. Oommen, Carleton University.
34. Fontaine, Martin, M.C.S., Text Classification with Illegible Documents, , May 2000.
35. Rios, Riverson, Ph.D., Learning Recursive Definitions in Prolog, first registration 1994, graduated 1998
36. Charlebois, Daniel, Ph.D., A Planning System Based on Plan Reuse and its Application to GIS and Remote Sensing, first registration 1990, graduated 1997
37. Guiming Chen, M.C.S., Fuzzy FOIL: A Fuzzy Logic Based Inductive Logic Programming System, first registration 1993, graduated 1996
38. Lapointe, Stéphane, M.C.S., Induction of Recursive Logic Programs, first registration 1990, graduated 1992
39. Massey, Louis, M.C.S., A Lazy Text-based Approach to Foundational Knowledge Acquisition, first registration 1993, graduated 1995
40. Ould-brahim, Hamid, M.C.S., SAFIR: Analogy-based System for Database Definition and Query Reuse, first registration 1990, graduated 1993
41. Rouget, Thierry, M.C.S., Learning Explainable Concepts in Presence of a Qualitative Model, first registration 1993, graduated 1995
42. Sun, Tei-Wei, M.C.S., DEPARS: Design Pattern Recognition System, first registration 1993, graduated 1997
43. Scott, Sam, M.C.S., Feature Engineering for a Symbolic Approach to Text Classification, first registration 1995, graduated 1998
44. Pelletier, Bertrand, Ph.D., Unsupervised Learning of Planning Knowledge, first registration 1989, graduated 1994, Carleton University, co-supervised with B. Pagurek

45. Affa, Ahmad, M.C.S., Case-based Approach to Software Reuse, first registration 1990, graduated 1995, Carleton University
46. Salembier-Pelletier, Maude, M.C.S., Learning of Disjunctive Concepts with EBL, 1990.
47. Plante, Boris, MCS, Révision d'une Théorie du Domaine par des Cas Marginaux, 1990.
48. Genest, Jean, MCS, Building Software Specifications Using EBL with Incomplete Theories, 1990.
49. Morin, Johanne, M.C.S., Apprentissage Incrémental de Contraintes Procédurales par une Méthode Mixte, 1990.
50. Quéant, Claude, M.C.S., A QUIZ Apprentice, 1986.
51. Charlebois, Daniel, M.C.S., Scriptes Comme un Mécanisme de Base d'un Système Expert, 1989.
52. Forsythe, Ken, M.C.S., Intelligent Backtracking in Automatic Theorem Proving, 1983.

STUDENTS CURRENTLY SUPERVISED:

1. Sobhani, Parinaz, PhD
2. Amilcar Soares, PhD, topic TBD, Brazilian “sandwich” year
3. Bruno Moreno, topic TBD, Brazilian “sandwich” year
4. Xuan Liu, M.Sc., Data Mining Algorithms in the Map-Reduce Paradigm
5. Elnaz Bigdeli, PhD, topic TBD, co-supervised with B. Raahemi
6. Benjamin Wang, PhD., topic TBD, started September 2010, co-supervised with N. Japkowicz
7. Erico Neves de Souza, PhD., , started Jan. 2010
8. Farid Seifi, Semi-supervised Learning, co-supervised with N. Japkowicz and C. Drummond, Exploiting Additional Data relationships in ML, started May 2009
9. Houman Abassian, co-supervised with N. Japkowicz and C. Drummond, Bias and Variance in Machine Learning, started May 2009
10. Leanne Seaward, PhD, started January 2008, Use of Kolmogorov-Smirnov Measure in Machine Learning, currently past-proposal stage
11. Morvarid Sehatkar, Ph.D., started in 2006, completing her thesis (proposal defended),

GRADUATE / UNDERGRADUATE COURSES: by year

2012	CSI 5387 Data Mining and Machine Learning (30 students)
2011	CSI 2911 Professional Practicum in Computer Science (50 students)
2010	CSI 5387 Data Mining and Machine Learning (24 students)
2009	CSI 5387 Data Mining and Machine Learning (30 students)
2008	CSI 5387 Data Mining and Machine Learning (25 students)
2007	CSI 7163B Advanced topics in computer systems: Machine Learning and Data Mining Systems, (enrolment 22 students)
2006	CSI 7162B Topics in Concept Learning and Text Mining
2004-2005	CSI7162 Topics in Computer Science
2000-2003	CSI 5389 Electronic Commerce Technologies (30 students)
1988-2005	CSI5387 Concept Learning and Data Mining (25 students)
1999	CSI 7163 Internet Commerce Technologies
1997-	CSI 5387 (Data Mining and Concept Learning)

1995-1996 CSI 5387 (Concept Learning)
1995 CSI 5388 (Topics in Machine Learning)
1990-1994 CSI 5387 (Concept Learning)

SEMINARS, INVITED PRESENTATIONS (2008-):

Federal University of Ceara, Fortaleza, Brazil, May 2012
Federal University of Pernambuco, Recife, Brazil, May 2012
Université de Lyon 2 – December 2010
Department of Artificial Intelligence, Moscow State University, Russia, April 2010
High School of Economics, Moscow, Russia, April 2010
Università degli Studi di Bari, Italy, March 2010 (3 presentations over two weeks)
Warsaw University, Institute of Computer Science, Warsaw, Poland, Jan. 2010
Polish Academy of Sciences, Institute in Computer Science, Warsaw, Poland, Jan. 2010
Dalhousie University, School of Computer Science, Halifax, Canada, Dec. 2009
ICIAP 2009 – 15th Int'l Conference on Image Analysis and Processing, Conference Invited Speaker, Salerno, Italy, Sep. 2009
Universitat Politècnica de Catalunya, Barcelona, Computer Architecture Department: IIIA-CSIC, Barcelona, Nov. 08
Cap 2009 – Conférence d'apprentissage, Conference Invited Speaker, Strasbourg, Jan. 2009
Barcelona Media, Feb. 2009
Universitat Pompeu Fabra, Information and Communications Technology Department, Feb. 2009
Universidad Politécnica de Madrid; Computer Science Department, Feb. 2009
Universitat Politècnica de Catalunya, Computer Systems Department, Apr. 2009
Universitat Politècnica de Catalunya, the Robotics Institute, Apr. 2009
Universitat Politècnica de Catalunya, Machine Learning Group, May 2009
Universidade de Porto, LIAA (Artificial Intelligence Research Group), May 2009
Universidade de Porto, Faculty of Medicine, May 2009
Universidade de Porto, Graduate Program in Intelligent Decision Support May 2009
LAAS, Toulouse, France, June 2009
MontLIRMM, pellier, France , June 2009
EMLR, Heidelberg, Germany, Dec. 2008
IIIA-CSIC, Barcelona, May 2008
University of Bolzano, Department of Computer Science, Bolzano, Italy, Mar. 2008

EXTERNAL RESEARCH FUNDING: by year, indicating source (granting councils, industry, government, foundations, other); amount; purpose (research, travel, publications, etc.)

2013-2019 Canada Research Chairs, Tier 1 Chair in Visual Text Analytics, \$1,400,000
2013 Canada Foundation for Innovation, Leaders Opportunity Fund, \$125,000
2012-2013 NSERC – Engage Grant – “Web Mining to protect Mobile App Users Against Fraud” - \$25,000. – 6 months

2011-2014 NSERC – Strategic grant – “Novel Techniques for Data Privacy Protection”, - \$328,515. -3 years (with M. L. Sokolova, Faculty of Medicine)

2012 CBIE (Canadian Bureau for International Education) – Canada-Brazil Awards; Joint Research projects, - \$30,900.

- 2011-2012 Public Works Government Services Canada, -“Canada Border Service Agency – Student Internship, - \$25,000.
- 2011-2012 Ontario Centres of Excellence – “Intelligent Monitoring and Analysis of the Global Navigation Satellite System Signal” - \$30,000.
- 2011 MITACS – Student Internship Program, \$15,000. – 8 months
- 2011-2015 NSERC Discovery Grant “Research in Machine Learning and Data Privacy”, \$210,000 (\$42,000/yr)
- 2010-2011 Ontario Ministry of Research and Innovation – “Recommender System for Electronic Parts” - \$35,000. – 6 months
- 2010-2011 NSERC – Engage grant – “Intelligent Monitoring and Analysis of the Global Navigation Satellite System Signal” - \$24,750. – 6 months
- 2010 NSERC – Engage grant –“Recommender System for Electronic Components”, - \$22,900. – 6 months
- 2010 Bell Canada – “Automated Risk Management” - \$32,300.
- 2009-2010 Ministry of Research and Innovation – “Access Management and Control Technology” - \$35,000., with Dr. A. Felty.
- 2009-2011 NSERC - Strategic Grant - "Analysis and Generation of Text with Personality", (D. Inkpen P.I.), \$87,500. – 2 years
- 2008-2009 Precarn/OCE Partnership, “Intelligent Mobile Content Agents”, \$100,000., with Dr. Inkpen
- 2007-2008 Precarn/OCE Partnership, “Embedding Machine Intelligence in the Systematic Review System”, \$150,000.
- 2007-2009 NSERC Cooperative Research and Development Grant “Finding best evidence for evidence-based best practice recommendations in health care”, with N. Cercone (York U., P.I; total \$313,000)
- 2007 Ontario Centres of Excellence, Market Readiness Program – Devera Logic, \$38,000.
- 2006-2008 NSERC Idea to Innovation Grant “Data mining training and assessment through digital games” (with I Squared Learning) NSERC \$247,500. I Squared Learning \$105,000. (Total \$352,500.)
- 2006-2010 NSERC Research Grant “Topics in Machine Learning and Data Privacy, \$38,000./year
- 2006-2007 Ontario Centres of Excellence, “Student Internship Program” \$20,000. Industry funding from TrialStat, \$10,000.

- 2006 I Squared Learning (studentship grant) “System of Educational Tools based on Games (DGBL) \$27,000.
- 2006 Ontario Centres of Excellence, “Research Centre in Data Mining at the University of Ottawa”, \$35,000.
- 2005-2006 NSERC funding “Intellectual Property Mobilization Program 2005 Competition”, \$7,500. and CIHR \$2,500.
- 2005-2006 Ontario Centres of Excellence (formerly CITO) i² L –“Data Mining Technologies for Digital-based Games Learning”, \$48,000.
- 2005 Ontario Centres of Excellence, “Enterprise Solutions for Verifications of Policy Compliance, Market Readiness program, \$25,500.
- 2005 NSERC Tools and Instruments Grant “Computational infrastructure for integrative data analysis in bioinformatics”, \$68,000, with X. Xia (P.I.) and V. Trudeau
- 2004 NSERC Idea to Innovation Grant “Application-centered Checkable Enablement of Privacy and Trust: ACCEPT”, \$125,000, with Dr. Amy Felty
- 2004 Communications and Information Technology Ontario, “Privacy-oriented Data Mining”, Tech readiness program, \$25,000
- 2003-2005 CITO Champion of Innovation, “Software Tools for Privacy in Data Mining”, \$200,000
- 2003-2005 CITO RPP Round 6.2 Research Grant Automatic Enforcement of Health Care Privacy Policies in Email (with N, Japkowicz, M.Geist), \$150,000
- ORNEC (Ontario Research Network fin Electronic Commerce), ORDCE, \$13,364,567 (one of two principal co-applicants)
- 2003-2006 SSHRC-INE Élaboration d'un didacticiel intelligent pour le développement de compétences en lecture chez les apprenants en langue seconde (with L. Duquette, C. Barrière, A. Desrochers, S. Szpakowicz; collaboration with M. Laurier, P. Balcom, G. Chevalier, J. Binon, T. Selva, S.Verlinde), \$86,667
- 2001-2005 NSERC Research Grant, Machine Learning in the Presence of Domain Knowledge, \$35,000/yr
- 2000-002 CITO RPP Round 6.1, Content Extraction from On-line Documents, \$120,000 with Amika Now
- 1998-2001 NSERC Strategic Grant, Data Analysis: Integrated Methodologies for Knowledge Discovery and Machine Learning, \$147,500/yr, with N. Cercone (P.I., Waterloo), W. Ziarko, H. Hamilton (Regina), R. C. Holte (Ottawa).

- 1998-2000 CITO RPP Round 1, Case-based Planning and Learning for Reuse, with J. Glasgow, R.C. Holte, \$85,000
- 1997 Bell Canada Research Contract, \$38,000, Use of Machine Learning Techniques to Acquire Software Quality Information
- 1996 NSERC Research Grant, \$29,500, Inductive Learning in the Presence of Background Knowledge
- 1996-1999 Text Summarization, NSERC/NRC, R.C. Holte (P.I.), \$170,000/yr
- 1995-1997 Software Reuse, ITRC/CITO (J. Glasgow, P.I.) \$80,000/yr
- 1995-1997 Canadian Environmental Hazards Detection System, PRECARN, \$100,000
- 1993-1995 NSERC Research Grant, \$17,000, Selected Problems in multi-strategy learning Inductive Logic Programming.
- 1991-1994 NSERC Strategic Grant, \$73,000, Machine Learning and text Analysis for Semi-automated Knowledge Acquisition, (Principal Investigator).
- 1993 Planning and Learning for Query Reuse (\$73,000), Pacific Forestry Canada
- 1993 Machine Learning in Support of Software Maintenance, Canadian Space Agency, (\$25,000)
- 1992 Case-based System for Analysis of Remote Sensing Data, CCRS, \$50,000
- 1990-1993 NSERC Strategic Grant, \$94,475, Machine Learning applied to software re-use (Principal Investigator)
- 1992 EMR Grant, \$44,000, Machine Learning and Planning Techniques for Expert Use of LDIAS
- 1990-1991 EMR Grant, \$56,000, Machine Learning Techniques for Acquiring Knowledge About Expert Use of LDIAS
- 1989-1991 NSERC Infrastructure Grant, \$90,000 (3 yr.), Support for a Unix Computing Facility, (principal applicant)
- 1989-1991 Cognos-OTF grant, \$198,000, Adaptive Modeller Support, (principal investigator (with F. Oppacher and S. Szpakowicz).
- 1989-1991 NSERC Operating Grant, \$13,943, Machine Learning Methods for Practical Knowledge Acquisition
- 1988-1990 URIF Grant, \$15,000, Knowledge Acquisition with Learning by Watching and with Text Analysis
- 1988-1991 NSERC University Industry Cooperative Grant, \$126,000, Advanced Knowledge Acquisition Methods, principal investigator (with F. Oppacher and S.

Szpakowicz) University of Ottawa Grant for a visiting scientist (T. Szapiro), \$3000.

- 1988 NSERC International Cooperation Grant, \$5,000, for a common project with Carnegie Mellon University
- 1987-1989 Cognos Grant, \$81,000, Knowledge Acquisition with Learning by Watching and with Text Analysis, (principal investigator with F. Oppacher and S. Szpakowicz) CCRIT Grant, \$17,200, Système Expert sur les Politiques et Procédures de Voyage
- 1985-1986 NRC/Cognos Grant, \$800,00 (approx.), The QUIZ Advisor System, member of a team, University of Ottawa Grant, \$3,000, User Interface for NEGOPLAN
- 1986-1988 NSERC Infrastructure Grant, \$75,000 (3 yr.), \$75,000, Support for a VMS and Unix Computing Facility, Principal Applicant NSERC Individual Operating Grant, \$41,700 (3 years), Learning in an Advisor System
- 1986 OCRI Individual Grant, \$7,200, Learning in an Advisor System
Ontario-Quebec Grant, Individual, \$1,500

INDUSTRIAL PROFESSIONAL ACTIVITIES

PROJECTS WITH:

GSTS, Inc. “Intelligent Monitoring and Analysis of the Global Navigation Satellite System Signal”, OCE and NSERC Engage

Canada Border Services Agency, “Machine Learning for face Recognition in Video Streams”

Lytica Inc.: “Recommender System for Electronic Components” (NSERC Engage grant)

Bell Canada: “Automated Risk Management’ project

Devera Logic Inc. :Computer Security, Identity and Access Management (one of the founders).

Distil Interactive (formerly I Squared Learning): data mining training and assessment through digital games; one of the founders.

TrialStat: developer of data analytics solutions for medical trials and systematic reviews.

Entrust: Canada’s leading IT Security company

AmikaMobile (formerly Amikanow): provider of technologies for information extraction from the WWW

IBM Canada: teaching Compiler Technology at TOROLAB, approx. 150 TOROLAB employees trained

Cognos, Inc.: leading a Cognos-sponsored research project (budget - approx. \$300,000), managing the research effort of a team of eight computer professionals,

Lanvista: in charge of an IRAP research project, a team of four

RES Inc. in charge of a team of three, co-managing a client-driven project

Macdonald Dettwiler Associates: managing the university component of the project, team of 3-4, budget \$100,000, deliverables-driven

ITRC: managing the university component of the project, team of four, budget approx \$100,000, in cooperation with Netron, Inc.

Canadian Space Agency: managing a project on software reusability

Canada Centre for Remote Sensing: managing several projects in applications of KB technologies to Remote Sensing, over a period of three years, total funding approx. \$300,000,

Natural Resources Canada: continuation of the work with CCRS, over two years, total funding \$150,000

Revenue Canada, acted as Science Advisor to the Scientific Research and Development Tax Credits program (Montreal and Ottawa) for a period of ten years

Owner and President of Matwin and Associates, Inc., a small consulting company specializing in software engineering and knowledge-based systems

PATENTS AND INVENTION DISCLOSURES

Patent: J. Sayyad Shirabad, S. Matwin, K. White, “System for Evaluating Game Play Data Generated by a Digital Games Based Learning Game”, US Patent, submitted May 20, 2007.

Patent: S. Matwin, A. Felty, B. Stepien, K. Grigg, “A Method to Detect and Report Conflicts in Policy Rules”, submitted to University of Ottawa, Tech Transfer and Business Enterprise office, Sept. 2008.

Invention Disclosure: S. Matwin, D. Inkpen, W. Elazmeh, O. Frunza, “Automatic classification of systematic review documents using a per-question classifier”, submitted to University of Ottawa, Tech Transfer and Business Enterprise office, Jan. 2007.

PUBLICATIONS

1) Life-time summary (count) according to the following categories:

Books authored and co-authored - 5

Chapters in books - 7

Papers in refereed journals - 48

Papers in refereed conference proceedings – 191

2) Same categories as above: books, chapters in books, papers in refereed journals,

TECHNICAL REPORTS OR PAPERS READ ARE NOT INCLUDED.

NOTE: names of co-authors who were graduate students or postdocs at the time of publication are **in bold**

Books authored:

1. Aijun An, Stan Matwin, Zbigniew W. Ras, Dominik Slezak: Foundations of Intelligent Systems, 17th International Symposium, ISMIS 2008, Toronto, Canada, May 20-23, 2008, Proceedings Springer 2008.
2. Joost N. Kok, Jacek Koronacki, Ramon López de Mántaras, Stan Matwin, Dunja Mladenic, Andrzej Skowron: Machine Learning: ECML 2007, 18th European Conference on Machine Learning, Warsaw, Poland, September 17-21, 2007, Proceedings Springer 2007.
3. Matwin, S. Sammut, C., Inductive Logic Programming, Proceedings of the 12th International Conference, Lecture Notes in Computer Science, Springer Verlag, Sydney, Australia, 2002.
4. Stroulia, E., Matwin, S. , Artificial Intelligence 2001, Proceedings of the international conference, Lecture Notes in Computer Science vol. 2056, Ottawa, Canada, June 2001.
5. PASCAL. Scientific and Technical Publishers. Iglewski, J. Madey, Matwin, S. Warsaw, four editions, 1977, 1979, 1984 and 1987 (176 pp.).

Chapters in Books:

1. Matwin, S., Privacy-preserving Data Mining Techniques – Survey and Challenges”, in Discrimination and Privacy in the Information Society, Effects of Data Mining and Profiling Large Databases, to appear, Springer V.
2. Matwin, S. “Privacy-related Aspects and Techniques”, Encyclopedia of Machine Learning, G. Webb, C. Sammut, Editors, Springer, 2010.
3. Matwin, S., Szapiro, T., “Data Privacy: From Technology to Economics”, in “Ryszard Michalski in memoriam”, Advances in Machine Learning II 2010: 43-74 Springer, 2010.
4. **Sayyad Shirabad J.**, Lethbridge, T. and Matwin, S., “Modeling Relevance Relations Using Machine Learning Techniques”, in J.Tsai (ed), Advances in Machine Learning Approaches in Software Engineering, D. Zhang and J. Tsai, Editors, IGI, 2007, pp. 168-207.
5. **Caropreso, F.**, Matwin S. and Sebastiani F., "A learner-independent evaluation of the usefulness of statistical phrases for automated text categorization.", in Amita G. Chin (ed.), Text Databases and Document Management: Theory and Practice, Idea Group Publishing, Hershey, PA, 2001, pp. 78-102.

6. Matwin S., **Plante B.**, "Theory Revision by means of Analyzing Explanations and Prototypes", Machine Learning, Vol. 4, pp. 217-238, R. Michalski, G. Tecuci eds, Morgan-Kaufmann 1994.
7. Szpakowicz S., Matwin S., "Advances in Logic Programming", in T.I. Ôren (ed.), in "Advances in Artificial Intelligence in Software Engineering", (ed), (JAI Press, Greenwich, CT, 1991) (with S. Szpakowicz) pp.192-201

Papers in Refereed Journals:

1. Esmín, A., Coelho, R., Matwin, S., -"A Review on Particle Swarm Optimization Algorithm and its Variants to Clustering High-dimensional Data", Artificial Intelligence Review, DOI 10, 1007/s10462-013-9400-4
2. Esmín, A., Matwin, S., - "A Hybrid Particle Swarm Optimization Algorithm with Genetic Mutation", International Journal of Innovative Computing Information and Control (IJICIC) 9(5): 1919-1934
3. Matwin, S., Sazonova, V., "Direct comparison between Support Vector Machine and Multinomial Naïve Bayes for medical abstract classification (letter to Editor)", Journal of the American Medical Informatics Appl., doi:10.1136/amiajnl-2012-001072
4. Matwin, S., Szapiro, T., "Data Privacy – Need for an Economic Perspective", Privacy Observatory Magazine. <http://www.privacyobservatory.org/issues/14-issue-1/28-data-privacy-need-for-an-economic-perspective>
5. Huang, J., Sayyad Shirabad, J., Matwin, S., Su, J., "Improving Multi-View Semi-supervised Learning with Agreement-based Sampling", Intelligent Data Analysis Journal, Volume 16, Number 5 /2012, pp.745-761
6. Zhilin, M., **Matwin, S.**, Turcotte, M. "Annotation Concept Synthesis and Enrichment Analysis: a Logic-Based Approach to the Interpretation of High-Throughput Experiments", Bioinformatics, Volume 27, No.17, 2011, pp. 2391-2398
7. Matwin, S., Kouznetsov, A., Inkpen, D., Frunza, O., O'Blenis, P., "Performance of SVM and Bayesian Classifiers on the Systematic Review Classification Task (letter to the Editor)", JAMIA 18(1), 2011, pp. 104-105
8. **Frunza, O.**, Matwin, S., Inkpen, D., **Klement, W.**, O'Blenis, P. "Exploiting the Systematic Review Protocol for Classification of Medical Abstracts", Journal of Artificial Intelligence in Medicine 51, (2011), pp. 17-25.
9. Herranz, J., Matwin, S., Nin, J., Torra, V., - "Classifying Data from Protected Statistical Datasets", Computers and Security, pp.875-890.
10. Farion, K., Michalowski, W., **Wilk, S.**, **O'Sullivan, D.**, Matwin, S. "A Tree-Based Decision Model to Support Prediction of the Severity of Asthma Exacerbations in Children". J. Medical Systems 34(4): 551-562 (2010)

11. Matwin, **Kouznetsov**, A., **S.**, Inkpen, D., **Frunza**, O., O'Blenis, P. "Using Factorized Complement Naïve Bays and weight Engineering for Reducing Workload in Evidence-Based Medicine Systematic Reviews", Journal of the American Medical Informatics Association, (JAMIA), Vol. 17, pp. 446-453, 2010
12. Matwin S., Chang L., Wright R., Zhan J., Editorial - "Privacy and Security Aspects of Data Mining" Special issue – International Journal of Information and Computer Security, 2008 Volume 2, No. 1 , pp. 1-3, 2008
13. **Zhan J.**, Matwin. **S.**, "Privacy-Preserving Support Vector Machine Classification", International Journal of Intelligent Information and Database Systems, 2007 Volume 1, No.3/4, pp.356-385.
14. **Zhan J.**, Matwin **S.**, "Privacy Preserving Data Mining in Electronic Surveys", International Journal of Network Security, Vol. 4, No. 3 pp.318-327, March 2007.
15. **Zhan, J.**, Matwin, **S.**, Chang, **L.**, "Privacy-Preserving Collaborative Association Rule Mining", Journal of Network and Computer Applications, Vol. 30, Issue 3, 2007, pp. 1216-1227.
16. **Zhan J.**, Chang L., Matwin S., "Privacy Preserving Multi-Party Decision Tree Induction", International Journal on Business Intelligence and Data Mining 2(2): 197-212 (2007)
17. **de Souza J.**, Matwin S., Japkowicz, N.: "Parallelizing Feature Selection", pp. 433-456, Algorithmica 45(3): 433-456 (2006).
18. Drummond C., Matwin **S.**, Gaffield C., "Inferring and Revising Theories with Confidence: Analyzing the 1901 Canadian Census", Applied Artificial Intelligence, vol.20, No. 1, pp.35-55, (2006)
19. **Zhan, J.**, Chang, **L.**, Matwin, **S.**, "Privacy Preserving K-nearest Neighbour Classification", I. J. Network Security 1 (1): pp. 46-51 (2005)
20. **Matwin S.**, Inductive Logic Programming: Guest Editor's Introduction, Machine Learning Journal, vol. 57, No. 3, pp. 203-204, (2004)
21. **Zhan J.**, Chang L., Matwin **S.**, "Privacy-Preserving Electronic Voting", Journal of Information Security, Vol.15, pp165-180, (2004).
22. **Ouerd M.**, Oommen B. and Matwin **S.**, "A formal approach to using data distributions for building causal Polytrees structures", Information Sciences Journal, vol. 168, pp. 111-131, (2004).
23. **Alphonse, E.** Matwin, **S.**, "Filtering Multi-Instance Problems to Reduce Dimensionality in Rational Learning", Journal of Intelligent Information Systems", Kluwer Academic, vol. 22(1), pp. 23-40, 2003.
24. **Morin, J.**, Matwin, **S.**, "GENEX: A Tool for Testing in ILP", Software Practice and Experience, vol. 31, pp. 1003-1023, 2001.

25. **Létourneau, S.**, Famili, F. **Matwin, S.**, “Data Mining for Prediction of Aircraft Component Failure”, IEEE Intelligent Systems, Special issue on DM, pp. 59-66 (1999).
26. Kubat, M., Holte, R., **Matwin, S.** , “Machine Learning for the Detection of Oil Spills in Satellite Radar Images”, Machine Learning Journal, 30, 195-215 (1998).
27. **Matwin, S.**, **Rios, R.** “Learning recursive definitions in Horn-clause logic”, Brazilian Computer Journal, 1(3), pp. 40-50, 1996.
28. **Clark, P.** Feng, C., **Matwin, S.**, Fung, K. "Improving Image Classification by Combining Statistical, Case-based and Model-based Prediction Methods", Fundamenta Informaticae, pp. 227-240, 1996.
29. **Matwin, S.**, Mason, C., "Environmental Applications of Artificial Intelligence", IEEE EXPERT and Intelligent Systems, vol. 10 No. 6, pp. 12-13, 1995.
30. **Matwin, S.**, **Charlebois, D.**, Goodenough, D., "Machine Learning and Planning for Data Management in Forestry", IEEE EXPRT and Intelligent Systems, vol. 10 No.6, pp. 35-41, 1996.
31. Goodenough, D, **Charlebois, D.**, **Matwin, S.** , Robson, R., 1994, “Automating of Expert System Software for Analysis of RS Data”, IEEE Trans. on Geoscience and Remote Sensing, vol. 32 No. 3, pp. 525-533..
32. Koperczak, Z., **Matwin, S.**, Szpakowicz, S., 1993, “Modelling of Negotiation Strategies Using Two Interacting Expert Systems”, Control and Cybernetics, vol. 21, no.1, 105-130.
33. **Fouque G.**, **Matwin S.**, 1993, "A Case-based Approach to Software Reuse", International Journal of Information Systems (Kluwer) 1, pp. 165-197.
34. **Matwin S.** and Szpakowicz S., 1992, "Machine Learning Techniques in Knowledge Acquisition from Text". THINK vol. 1(2), 37-50.
35. Bergadano, F., **Matwin, S.**, Michalski, R.S., Zhang, J., “Learning Two-tiered Descriptions of Flexible Concepts”, Machine Learning Journal, 1992, 8, pp. 5-43.
36. **Matwin, S.** , Szapiro, T., **Haigh, K.** , 1991, “Genetic Algorithms Approach to a Negotiation Support System”, in IEEE Transactions on Systems, Man and Cybernetics, 21:1, pp. 102-114.
37. **Constant, P.**, **Matwin, S.** , Oppacher, F., 1990, “LEW: Learning by Watching. A Machine Learning System for Knowledge Acquisition”, in IEEE Transactions on Pattern Analysis and Machine Intelligence, 12:3, pp. 294-307.
38. **Geldrez, C.**, **Matwin, S.**, **Morin, J.**, Probert, R.L., 1990, “Protocol Conformance Testing by Explanation-based Learning”, IEEE Expert, 5:5, pp. 45-60.

39. Matwin, S. , Oppacher, F., **Constant**, P., 1989, “Knowledge Acquisition by Incremental Learning from Problem solution Pairs”, Computational Intelligence, 5:2, pp. 58-66.
40. Matwin, S., Szpakowicz, S., Koperczak, Z., Kersten, G., Michalowski, W., 1989, “NEGOPLAN: An Expert System Shell for Negotiation Support”, IEEE Expert, 4:4, pp. 50-62.
41. Kersten, G., Michalowski, W., Matwin, S. , Szpakowicz, S., “Representing the Negotiation Process with a Rule based Formalism”, Theory and Decisions, vol. 22, pp. 225-257, 1988.
42. Matwin, S., Pietrzykowski, T., “Intelligent Backtracking in Plan based Deduction”, IEEE Transactions on Pattern Analysis and Machine Intelligence, 7:6, pp. 682-692, 1986.
43. Matwin, S., **Forsythe**, K., “Copying Dynamic Structures in a PASCAL Environment”, Software Practice and Experience, 16:4, pp. 335-340, 1986.
44. Matwin, S., Pietrzykowski, T., “The Programming Language PROGRAPH: A Preliminary Report”, Computer Languages, 10:2, pp. 91-125, 1985.
45. Skuce, D., Matwin, S., Szpakowicz, S., Tazovitch, B., and Oppacher, F., “A Logic_Based Knowledge Source System for Natural Language Documents”, Data and Knowledge Engineering, pp. 201-231, 1985.
46. Matwin, S.: On the Completeness of a Set of Transformations Optimizing Linear Programs. - Inf. Process. Lett. 6(5): 165-167, 1977.
47. Matwin, S.: An Experimental Investigation of Geschke’s Method of Global Program Optimization. – Inf. Process. Lett. 6 (6): 177-179, 1977.
48. Matwin, S., Missala, M., - “A Simple machine Independent Tool for Obtaining Rough Measures of Pascal Programs”, SIGPLAN, Vol. 11, pp. 42-45, August 1976.

Papers in Refereed Journals (Submitted):

1. Nin, J., Matwin, S. “Private Distributed Stream Algorithms using Sketches”, submitted
2. Razavi, A., De Koninck, J. Matwin, S., „Dream Description Analysis Using Text Mining Methods”, submitted

Papers in Refereed Conference Proceedings (since 1985):

1. Esmin. A., Oliveira Junior, R., Matwin, S. - “Hierarchical Classification Approach to Emotion Recognition in Twitter”, Procs of ICMLA 2012 (International Conference on Machine Learning and Application), Boca Raton, Florida, December 2012, to appear.
2. Bouillot, F., Poncelet, P., Roche, M., Ienco, D, Bigdeli, E, Matwin, S.,”1886-French Presidential Elections: what are the Most Efficient Measures for Tweets?” - CIKM Workshop on Politics, Elections, and Data (PLEAD), Hawaii, November 2012, to appear.

3. Esmin, A., Matwin, S., “Data Clustering using Hybrid Particle Swarm Optimization”, Procs of IDEAL 2012, Natal, Brazil, August 29-31, Springer 2012, v 7435, pp. 159-166.
4. Stepien, B., Felty, A., Matwin, S., “An Algorithm for Compression of XACML Access Control Policy Sets by Recursive Subsumption”, Procs. of ARES 2012, Prague, Aug. 2012.
5. **Neves, E.**, Matwin, S., “Improvements to AdaBoost Dynamic “, Procs. of the Canadian Artificial Intelligence Conference, Toronto, 2012, to appear.
6. Kiritchenko, S., Matwin, S. – Most Influential Paper of CASCON 2001, Reprint – “Email Classification with Co-Training”, Procs of CASCON 2011, Toronto, November 2011.
7. Klement, W., Japkowicz, N., Matwin, S., Flach, P., “Smooth Receiver Operating Characteristics (smROC) Curves”, Procs. of ECML/PKDD 2011, Athens, Greece, September 2011, pp. 193-208. .
8. Stepien, B., Felty, A., Matwin S., “Advantages of a Non-Technical XACML Notation in Role-Based Models”, Procs, Conference on Privacy, Security and Trust, Montreal, July 2011, pp. 193-200.
9. Su, J., Sayyad Shirabad, J., Matwin, S., “Large Scale Text Classification using Semi-supervised Multinomial Naïve Bayes”, Procs of 28th International Conference on Machine Learning (ICML 2011), Seattle.
10. **Klement, W.**, Wilk, S., Michalowski, W., Matwin, S., “Classifying Severely Imbalanced Data”, Procs. of AI 2011 annual conference, pp. 258-264..
11. **Neves, E.**, Matwin, S., “Extending AdaBoost to Iteratively Vary Its Base Classifiers”, Procs, of AI 2011 annual conference, pp. 384-389.
12. Matwin, S., **Razavi, A.**, De Koninck, J. , Amini, R., “Classification of Dreams using Machine Learning”, procs of ECA/PAIS Conference, Lisbon, Portugal, August 2010, pp.169-174.
13. **Razavi, A.**, Inkpen, D., Uritsky, S. and Matwin, S., “ Offensive Language Detection Using Multi-level Classification”, Procs. of AI 2010 annual conference, Ottawa, May/June 2010, Springer, pp. 16-27.
14. **Abbasian, H.**, Drummond, C., Japkowicz, N., Matwin, S., “Robustness of Classifiers to Changing Environments”, procs of AI 2010 annual conference, Ottawa, May/June 2010, Springer, pp. 232-243.
15. **Jiline, M.**, Matwin, S., Turcotte, M., “Annotation Concept Synthesis and Enrichment Analysis”, procs of AI 2010 annual conference, Ottawa, May/June 2010, Springer, pp. 304-308.

16. **Seifi, F.**, Drummond, C., Japkowicz, N., Matwin, “Improving Bayesian Learning Using Public Knowledge” , procs of AI 2010 annual conference, Ottawa, May/June 2010, Springer, pp. 348-351.
17. **Frunza, O**, Inkpen, D., Matwin. S., “Building Systematic Reviews Using automatic Text Classification Techniques”, COLING 2010, Beijing, August 2010, pp. 303-311.
18. **Huang, J.**, Sayyad, J., Matwin, S., Su, J., “Improving Co-training with Agreement-Based Sampling”, Procs. of RSCTC 2010, Warsaw, Poland, pp. 197-206.
19. Stepien, B., Matwin, S. Felty, A., Strategies for Reducing Risks of Inconsistencies in Access Control Policies, ARES 2010, Krakow, Poland, Feb. 2010, pp. 140-147.
20. Matwin **S.**, Privacy and Data Mining: New Developments and Challenges. Exploitation et Gestion de Connaissances, 2009, page 1 (invited paper).
21. Herranz, J., Matwin, S., Meseguer, P., Nin, J., “A Cryptographic Solution for Private Distributed Simple Meeting Scheduling” to appear, CCIA 2009, Barcelona, pp. 275-283.
22. Matwin, S., Image Processing and Machine Learning: How to Foster a Stronger Connection, 15th International Conference on Image Analysis and Processing, Italy, 2009, p. 7.
23. Seaward, L., Matwin, S., “Intrinsic Plagiarism Detection using Complexity Analysis” In Proceedings of the PAN '09 workshop for Uncovering Plagiarism, Authorship and Social Software Misuse affiliated with the 25th Annual Conference of the Spanish Society for Natural Language Processing, San Sebastian, pp. 56-61, (2009).
24. Su, J., **Sayyad-Shirabad, J.** Matwin, S., **Huang, J.**, Une méthode discriminative de sélection d’instances utilisant les arbres aléatoires, Conférence francophone sur l’Apprentissage artificiel, Plate-forme AFIA 2009, Hammamet, Tunisie, June 2009, pp. 53-65.
25. Stepien, B., Felty, A., Matwin, **S.** – “A User-oriented Display Notation for XACML Access Control”. MCEtech, Montreal, May 2009, pp.53-64.
26. **Klement, W.**, **Wilk, S.**, Michalowski, W., Matwin, S. “Dealing with Severely Imbalanced Data”, ICEC Workshop at PAKDD 2009, Bangkok, pp.14-25.
27. **Kouznetsov, A.**, Matwin, S., Inkpen, D., **Razavi, A.**, **Frunza, O.** **Sehatkar, M.** **Seaward, L.**, O’Blenis, P. “Classifying Biomedical Abstracts Using Committees of Classifiers and Collective Ranking Techniques”, Procs of AI 2009 annual Conference, Kelowna, B.C. May 2009, pp. 224-228.
28. **Klement, W.**, Flach, P., Japkowicz, N., Matwin, S., “Cost-based Sampling of Individual Instances”, Procs of AI 2009 Annual Conference, Kelowna, B.C. May 2009, pp. 86-97.
29. **Su, L.**, **Sayyad Shirabad, J.**, Matwin, S., Huang, J. “Active Learning with Automatic Soft Labeling for Induction of Decision Trees”, Procs of AI 2009 annual Conference, Kelowna, B.C. May 2009, pp.241-244.

30. **Huang, J.**, Ling, C.X.,Zhang, H., Matwin, S.- “Proper Model Selection with Significance Test”, Procs of ECML PKDD 2008, Antwerp, Belgium, September 2008, pp. 536-547.
31. **Wilk, S.**, Michalowski, W., Farion, K., **O’Sullivan, D.**, Matwin, S.” Engineering of a Clinical Decision Support Framework for the Point of Care Use”, Procs of AMIA 2008 Annual Symposium, Washington, pp.814-818.
32. Zhan, Z., Chang, L., Matwin, S. “How to Prevent Private Data from Being Disclosed To A Malicious Attacker”. In Data Mining: Foundations and Practice, Springer-Verlag, pp. 517-528, (2008).
33. **Razavi, A., Amini R., Sabourin C., Sayyad Shirabad J., Nadeau D., Matwin S., De Koninck J.** – “Evaluation and Time Course Representation of the Emotional Tone of Dreams Using Machine Learning and Automatic Text Analysis”, 19th Congress of the European Sleep Research Society, Glasgow, Scotland, September 2008. Abstract in “Journal of sleep Research”, p.257
34. **Zhan, Z., Chang, L., Matwin, S.** “Privacy-Preserving Naïve Bayesian Classification Over Horizontally Partitioned Data”. In Data Mining: Foundations and Practice, Edited by T.Y. Lin and Y. Xie, Springer-Verlag, pp. 529-538, (2008).
35. **Razavi, A., Amini R., Sabourin C., Sayyad Shirabad J., Nadeau D., Matwin S., De Koninck J.**- “Development of an automatic analysis technique for the classification and modeling of dreams’ emotional content”, Procs of the Conference of the Association of the Study of Dreams, Montreal QC, July 2008
36. **Su J., Zhang H., Ling C., Matwin, S.** – “Discriminative Parameter Learning for Bayesian Networks”, Procs of ICML 2008 Conference, Helsinki, July 2008, pp. 1016-1023.
37. **Razavi, A., Amini R., Sabourin C., Sayyad Shirabad J., Nadeau D., Matwin S., De Koninck J.,** - “Classification of emotional tone of dreams using Machine Learning and Text Analysis”, Procs of SLEEP 22nd Annual Meeting of the Associated Professional Sleep Societies, Baltimore MD, June 2008. Abstract published: Sleep, 31, A380-381.
38. Letourneau, S., Matwin, S., Famili, F. – “Generation of Globally Relevant Continuous Features for Classification”, Procs of PAKDD Conference, May 20-23, 2008, Osaka, Japan, pp. 196-208.
39. **O’Sullivan, D., Elazmeh, W., Wilk, S., Farion, K., Matwin, S., Michalowski. W., Sehatkar, M.** – “Using Secondary Knowledge to Support Decision Tree Classification of Retrospective Clinical Data”, Procs of the Third International Workshop on Mining Complex Data-in conjunction with ECML/PKDD 2007, Warsaw, Poland – September 17-21, 2007, pp. 238-251.
40. **Capretta V., Stepien B., Felty A., Matwin S.,** “Formal Correctness of Conflict Detection for Firewalls”, Procs of Formal Methods in Security Engineering Conference, Virginia, November 2007, pp. 22-30.

41. **Caropreso. F.**, Matwin S., “Incorporating Syntax and Semantics in the Text Representation for Sentence Selectio”, Procs of Recent Advances in National Language Processing Conference, Bulgaria, September 2007, pp. 109-113.
42. **O’Sullivan D.**, Matwin S., Michalowski, W., **Wilk, S.**, - “A Concept-Based Framework for Retrieving Evidence to Support Physician Decision Making at the Point of Care”, Procs of From Knowledge to Global Care, AIME Workshop, Amsterdam, July 7, 2007, pp.117-126.
43. **Sayyad Shirabad,J.** Matwin, S. White, K. “Using Data Mining Techniques in Assessing Subjective Skills: An Application in Digital Based Game Learning”, Procs. Of the Group Decision and Negotiation Conference, Montreal, 2007, pp. 337-347.
44. **Elazmeh, W.**, **O’Sullivan, D.**, Farion, K. Matwin, S., Michalowski, W., “Insights from Predicting Pediatric Asthma Exacerbations from Retrospective Clinical Data”, AAAI Workshop on Performance Evaluation in Machine Learning, July 2007.
45. **Zhan, Z.**, Chang, L., Matwin, S. “How to Prevent Private Data from Being Disclosed To A Malicious Attacker”. In Data Mining: Foundations and Practice, Edited by T.Y. Lin and Y. Xie, Springer-Verlag, 2006
46. **Zhan, Z.**, Chang, L., Matwin, S. “Privacy-Preserving Naïve Bayesian Classification Over Vertically Partitioned Data”. In Data Mining: Foundations and Practice, Edited by T.Y. Lin and Y. Xie, Springer-Verlag., 2006.
47. **Elazmeh W.**, Japkowicz N., Matwin S., “Evaluating Misclassifications in Imbalanced Data”, 17th ECML Conference, Procs Lecture Notes in AI, Vol. 4212 Springer, Berlin Sept. 18-22, 2006, pp. 126-137
48. **Zhan, Z.**, Matwin S., “A Crypto-Based Approach of Privacy-Preserving Collaborative Data Mining”, IEEE International Workshop on Privacy Aspects of Data Mining, Procs of PADM 06, Hong Kong, 2006, ICDM workshops, 546-550.
49. **Zhan, Z.**, Matwin, S., “Privacy-oriented Learning Systems”, IEEE International Conference on Systems, Man, and Cybernetics, Taipei, Taiwan, October 8-11, 2006
50. **Zhan J.**, Chang L., Matwin S., “Privacy-Preserving Collaborative Data Mining”, Studies in Computational Intelligence, Springer 2006, ISBN: 3-540-28315-3, pp. 213-227
51. **Kiritchenko, S.**, Matwin, S., Nock, R., Famili, F, “Learning in the Presence of Class Hierarchies”, Procs. Of Learning@Snowbird 2006, Snowbird, UT, April 2006.
52. **Kiritchenko, S.**, Matwin, S., Nock, R, Famili, F, “Learning and Evaluation in the Presence of Class Hierarchies: Application to Text Categorization”, Procs of AI’2006, Québec, QC., pp. 395-406
53. Nadeau, D, Sabourin, C., De Koninck, J., Matwin, S., Turney, P, - Automatic Dream Sentiment Analysis, Procs. of the Twenty-first National conference on AI, 2006.

54. **Nadeau, D**, Turney, P., Matwin, S., “Unsupervised Named-Entity Recognition: Generating Gazetteers and Resolving Ambiguity”, Procs of AI’2006, Québec, QC., pp. 266-277
55. **Caropreso, F**, Matwin, S., “Beyond the Bag of Words: a Text Representation for Sentence Selection”, Procs of AI’2006, Québec, QC., pp. 324-335
56. **Boufaden, N, Elazmeh, W, Elkadri, N**, Matwin, S., Japkowicz, N., “PEEP – Privacy Enforcement in Email Project”, Procs. Of the Privacy, Security and Trust Conference, St. Andrews, NB 2005, pp. 257-260
57. **Souza, J.**, Japkowicz, N., Matwin, S., “STochFS: A Framework for Combining Feature Selection Outcomes through a Stochastic Process”, Procs. Of PKDD 2005, Porto, pp.667-674.
58. **Boufaden N., Elazmeh W.**, Matwin S., Japkowicz, N. Elkadri N., “PEEP – An Information Extraction based approach for Privacy Protection in Email”, Procs. of the Second Conference on Email and Anti-Spam –CEAS 2005, Stanford University, July 2005 (8 pp.)
59. **Souza, J**, Japkowicz, N., Matwin, S., “Feature Selection with A general Hybrid Algorithm”, Procs. Of the Feature Selection in Data Mining, SIAM International Conference on Data Mining, Los Angeles, 2005, pp. 45-51.
60. **Dufay, G.**, Felty, A., and Matwin, S., “Privacy-Sensitive Information Flow with JML”, Procs of CADE 2005, Tallin, July 2005, pp. 116-130.
61. **Kiritchenko, S**, Matwin, S, and Famili, F., “Functional Annotation of Genes Using Hierarchical Text Categorization”, Procs of Biolink SIG of ACL 2005 (4 pp.)
62. **Zhan, J.**, Matwin, S., Chang, L., Privacy-Preserving Collaborative Association Rule Mining, Procs. of the 19th Annual IFIP WG 11.3 Working Conference on Data and Applications Security, Storrs, CT, August 2005, pp. 153-165
63. **Zhan, J.**, Matwin, S., Chang, L., “Privacy Mining Association Rules”, Procs. of the IEEE International Conference on Intelligence and Security Informatics”, Atlanta, GA, May 2005, pp. 72-80
64. **Armour Q., Elazmeh W., Elkadri N,** Japkowicz N., Matwin S., “Privacy Compliance Enforcement in Email”, Procs. of the AI’2005, Victoria, B.C., June 2005 , pp. 194-204.
65. Matwin S., Felty A., **Hernadvolgyi I.**, and **Capretta V.**, “Privacy in Data Mining Using Formal Methods”, Proceedings of the Seventh International Conference on Typed Lambda Calculi and Applications, Nara, Japan, Apr. 2005, pp. 278-292.
66. **Zhan J.**, Chang L., Matwin S., “Collaborative Association Rule Mining by Sharing Private Data”, Procs of the Conference on e-Technologies, Montreal, 2005, pp. 193-197.

67. **Zhan J.**, Matwin **S.**, Japkowicz N., Chang L., “Bayesian Network Induction with Incomplete Private Data” Procs of the Fourth International Conference on Electronic Business, Beijing, 2004, pp. 1119-1124.
68. **Zhan J.**, Matwin **S.** “Privacy-Preserving Data Mining In Electronic Surveys” Procs. of the Fourth International Conference on Electronic Business, Beijing, Dec. 2004, pp. 1179-1185.
69. **Zhan J.**, Matwin **S.**, Japkowicz N., Chang L. “Privacy-Preserving Collaborative Association Rule Mining”, Procs of the Fourth International Conference on Electronic Business, Beijing, Dec. 2004, pp. 1172-1178.
70. **Mucsi-Nagy**, A and Matwin **S.** “Digital Fingerprinting for Sharing of Confidential Data”, ECML/PKDD 2004 Workshop on Privacy and Security in Data Mining (PDSM) 04, Pisa, Italy, Sep. 2004, to appear.
71. **Kiritchenko S.**, Matwin **S.**, Famili F., “Hierarchical Text Categorization as a Tool of Associating Genes with Gene Ontology Codes”, ECML/PKDD 2004 Workshop on Data Mining and Text Mining for Bioinformatics, Pisa, Sep. 2004, pp. 26-30.
72. **Zhan J.**, Chang L. and Matwin, **S.**, , "Privacy-Preserving Collaborative Sequential Pattern Mining", Workshop on Link Analysis, Counter-terrorism, and Privacy in conjunction with SIAM International Conference on Data Mining, April 24, 2004, Lake Buena Vista, Florida, pp 61-72.
73. **Kiritchenko S.**, Famili F., Matwin **S.**, “Functional genomics by means of hierarchical text categorization”, Procs of the 5th Annual Meeting of the NRC's Genomics and Health Research Initiatives Program (GHI) – Montréal, 2004, pp. 192-201.
74. **Zhan Z.**, Chang L. and Matwin **S.**, « "Privacy-Preserving Multi-Party Decision Tree Induction", In 18th Annual IFIP WG 11.3 Working Conference on Data and Application Security, Sitges, Catalonia, Spain, July 25-28, 2004, pp.341-355.
75. **Sayyad Shirabad J.** Lethbridge T., Matwin **S.**, “Mining Software Change Repository of a Legacy Telephony System", Procs of MSR 2004 - The International Workshop on Mining Software Repositories, Scotland, 2004.
76. **Kiritchenko S.**, Matwin **S.**, Abu-Hakima S., E-mail Classifications with Temporal Features, Procs of the Intelligent Information Systems 2004, Zakopane, Poland, 2004, pp. 523-534.
77. **Zhan Z.**, Chang L., Matwin **S.**, “Using Randomized Response Techniques for Privacy-preserving Naïve Bayesian Classification”, Procs of Applied Artificial Intelligence, Innsbruck, 2004, 411-163 pp. 14-20.
78. Sayyad Shirabad, J., Lethbridge, T., Matwin, S., -"Mining the Maintenance History of a Legacy Software System", Procs of ICSM 2003, Amsterdam, pp. 95-104.

79. de **Almeida M.**, Matwin **S.**, Machine Learning with Hypothesis Representation Based on Object-oriented Languages, Procs. of the 23rd Congress of the Brazilian Computer Society, Campinas, 2003, pp. 397-404 (in Portuguese)
80. **Sayyad Shirabad J.**, Lethbridge T., Matwin **S.**, “Applying data mining to software maintenance records”, Procs. of CASCON 2003, Toronto, pp. 136-148, 2003
81. Nedellec C., **Abdel Vetah M. Caropreso F., Manine P.**, Matwin **S.**, “Sentence Categorization in Genomics Bibliography: a Naïve Bayes Approach”, Informatique pour l'analyse du transcriptome, Paris, 2003.
82. **Zaluski M.**, Japkowicz N., Matwin **S.**, Case Authoring from Text and Historical Experiences. AI2003, Halifax, pp. 222-236.
83. **Ouerd M**, Oommen, J, Matwin, **S.** "Enhancing Caching in Distributed Databases Using Intelligent Polytree Representations" AI2003, Halifax, pp. 498-504.
84. Souza, J., Matwin, S., Japkowicz, N., - “Evaluating Data Mining Models: A Pattern Language, Procs. of PLOP 2002, Monticello, IL. 2002
85. Felty, A., Matwin, **S.** Privacy-oriented Data Mining by Proof Checking`, Procs. of the 13th European Conference on Machine Learning, Helsinki, 2002, pp. 138-149, Springer Verlag.
86. **Ouerd**, M, Oommen J., and Matwin, **S.**, Data Generation For Testing Bayesian Networks: “The Case of Directed Acyclic Graphs” accepted to IEEE Systems, Man and Cybernetics, 2002, pp. 192-201.
87. Drummond C., Matwin **S.**, “Inferring and revising theories with confidence: data mining the 1901 Canadian census”, Procs. of the ECML/PKDD'02 Workshop on "Mining Official Data" (MOD'02), Helsinki, Finland, 2002, pp. 192-201.
88. **Souza J.**, Japkowicz N., Matwin **S.**, “ForTalBooster - A General Technique for Boosting Feature Selection Systems”, to appear, Procs. of Artificial Intelligence and Soft Computing (ASC 2002)
89. **Alphonse E.**, Matwin **S.**, “A Dynamic Approach to Dimensionality Reduction in Relational Learning”, to appear, Procs. ISMIS 2002, June 2002, Lyon.
90. **Alphonse E.**, Matwin **S.**, “Feature Selection and Inductive Logic Programming”, to appear, Procs. of the The Nineteenth International Conference on Machine Learning, Sydney, Australia, July 2002.
91. **Souza, J.** and Matwin, **S.** “A Pattern Language for Providing Client-Server Secure Communication” SugarLoafPLOP 2001 - First Latin American Conference on Pattern Languages of Programming, Rio de Janeiro - Brazil, October of 2001.
92. **Sayyad-Shirabad, J.**, Lethbridge, T., Matwin **S.**, “Supporting Software Maintenance by Mining Software Update Records”, Proceedings of the IEEE International Conference on Software Maintenance, Florence, Italy, pp. 22-31, 2001.

93. **Kiritchenko, S.** and **Matwin S.**, Email Classification with Co-Training. In Proc. of CASCON 2001, pages 192-201, Toronto, Canada, 2001.
94. **Gomes, F. Matwin, S.**, “Comparing Diagnostic Models for CPA Tumors”, Proceedings of the International Conference on Mathematics and Engineering Techniques in Medicine and Biological Sciences, Las Vegas, 2001 pp. 432-438.
95. **Alphonse, E. Matwin, S.**, « Sélection d'attributs en Programmation Logique Inductive pour algorithmes ascendants », Procs. of Conférence d'apprentissage, Grenoble, June 2001, pp. 17-30.
96. **Alphonse, E., Matwin, S.**, "Feature Selection in Bottom-up ILP Systems", Procs. of the 11th International Conference on ILP (Emerging Work Session), Strasbourg, 2001.
97. **Sayyad-Shirabad, J., Lethbridge, T., Matwin, S.**, “Supporting Maintenance of Legacy Software with Data Mining Techniques, Procs of CASCON2000, pp. 137-151.
98. **Morin, J. Matwin, S.**, “The Contextual LGG with Functors”, Work in Progress Notes, International Workshop on Inductive Logic Programming, London, 2000.
99. **Oommen, J., Ouerd, M., Matwin, S.**, “A formalism for building causal poly tree structures using data distributions”, Procs. Of the Int'l Symposium on Intelligent Systems, Charlotte, NC, 2000, pp. 629-638.
100. **Morin, J., Matwin, S.**, “Learning relational cliches with contextual LGG”, Procs. Of the Int'l Symposium on Intelligent Systems, Charlotte, NC, 2000, pp. 274-309.
101. **Fontaine, M., Matwin, S.**, “Feature Extraction Techniques for Unintelligible Texts”, Procs. Of the Text Mining Workshop, KDD 2000 - International Conference on Knowledge Discovery in Databases, Boston, 2000.
102. **Kersten, G., Kersten, M., Matwin, S., Noronha, S.** “The Software for Cultures and the Cultures in Software”, European Conference on Information Systems, Vienna, May 2000, pp. 509-514.
103. **Scott, S. Matwin, S.**, “Feature Engineering for Text Classification”, Proceedings of the 16th International Conference on Machine Learning, Bled, Slovenia, 1999, pp. 379-388.
104. **Morin, J., Matwin S.**, “Extending LGG top Work in Context”, Proceedings of the International Workshop on Inductive Logic Programming, Bled, Slovenia, 1999.
105. **de Almeida M., Matwin S.**, “Machine learning method for software quality model building”, Procs. of the Int'l Symposium on Intelligent Systems, Warsaw, Poland, 1999, pp. 565-574.
106. **Chali Y., Matwin S., Szpakowicz S.**, “Query-Biased Text Summarization as a Question-Answering Technique”, to appear, Procs. of the 1999 Stanford Fall Symposium on Text Summarization.

107. Scott, S and Matwin, S., "Text classification using WordNet hypernyms". Procs of Usage of WordNet in Natural Language Processing Systems: Proceedings of the Workshop 1998 pp.45-51.
108. Delisle, S., **Létourneau, S.**, Matwin, S., "Experiments with Learning Parsing Heuristics", Procs. of ACL-COLING 98, Montreal, pp. 307-314, 1998.
109. **Létourneau, S.**, Matwin, S., Famili, F., A Normalization Method for Contextual Data: Experience from a Large-Scale Application, Procs. of the 10th European Conference on Machine Learning, Chemnitz, Springer Verlag LNAI 1398, pp. 49-54, 1998.
110. **Oliveira, K. M.**, Rocha, A. R., Travassos, G. H., Matwin, S., Towards a Domian-Oriented Software Development Environment for Cardiology", Procs. of the 5th Doctoral Consortium on Advanced Info. Systems Engineering, Pisa, June 1998, CAiSE 98
111. **Oliveira K.M.**, **Matwin S.**, "KED: A Knowledge Editor for Cardiology", XII Simposio Brasileiro de Engenharia de Software, Parana, Brazil, pp. 21-28, 1998.
112. **Delannoy J.F.**, **Barker K.**, Copeck T., Laplante M., Matwin S., Szpakowicz S., "Flexible Summarization", AAAI Spring Symposium Workshop on intelligent text summarization, Stanford University, March 1998
113. Pietrzak L., Baum B.R., Matwin S., Fregeau-Reid J., "Wheat Classification System Based on Colour Imaging", Proceedings 16th ICC Conference Cereal Science - Contribution to Health and Well Being May 9-12, 1998, Vienna, Austria.
114. Zaremba, M.B., Fraczak, W., Matwin, S., Yos-Nhean, T., Gorse, N., "Heterogeneous Intelligent Systems: Integration and Synchronisation of Concurrent Processes", 5th IFAC Workshop on Intelligent Manufacturing Systems (IMS'98), Gramado, Brazil, pp.181-185, 1998.
115. **Sun, T. W.**, Matwin, S., DEPARS: Design Pattern Recognition System, Procs. of the VIII International Conference on Software Technology, Curitiba, pp. 111-124, 1997.
116. **Létourneau S.**, Famili A., Matwin S., Discovering Useful Knowledge from Aircraft Operation/Maintenance Data, Procs. of the Workshop on Machine Applications in the Real World: Methodological Aspects and Implications, 14th International Conference on Machine Learning, Nashville, TN, pp. 34-41, 1997.
117. **Kubat, M.** Matwin, S., "Addressing the Curse of Imbalanced Training Sets: One-sided Selection", Procs. of the 14th International Conference on Machine Learning, Nashville, TN, 1997.
118. **Kubat, M.**, Holte, R., Matwin, S., Learning When Negative Examples Abound, Procs. of ECML-97, Prague 1997, Springer Verlag, LNAI 1227, pp. 146-152.

119. Matwin, S., Kubat, M., "The Role of Context in Concept Learning", Procs of ICML 1996 Workshop, pp. 1-5.
120. Matwin, S., **Rouget**, T., Explainable Induction with an Imperfect Qualitative Model, Procs. of the 11th International Symposium on Computer and Information Science, Antalya, pp. 415-425, 1996.
121. **Charlebois**, D., Goodenough, D., Matwin, S., Bhogal, A. S., Barclay, H., "Planning and Learning in a Natural Resource Information System", Procs. of AI-96, pp. 187-199, Toronto, 1996.
122. Matwin, S., **Rios**, R., "Efficient Induction of Recursive Prolog Definitions", Procs. of AI-96, pp. 240-248, Toronto, 1996.
123. **Li**, X., Szpakowicz, S., Matwin, S., "A WordNet Based Algorithm for Word Sense Disambiguation", Procs. of 11th Int'l Joint Conf on AI IJCAI-95, pp. 1368-1374, Montréal, 1995.
124. Matwin, S., Charlebois, D., Goodenough, D., 1995, Training agents in a complex environment, Procs. of the 11th IEEE Conference on AI for Applications (CAIA), pp. 94-100, Los Angeles, 1995.
125. Goodenough D., Bhogal P., **Charlebois** D., Heyd M., Matwin S., and Portigal F., "Knowledge- Based Imaging Spectrometer Analysis and GIS for Forestry", IEEE Pacific Rim Conference on Communications, Computers, and Data Processing, pp. 287-291, Victoria, 1995.
126. Goodenough D., **Charlebois** D., Bhogal P., Heyd M., Matwin S., Niemann O., and Portigal F., "Intelligent Data Fusion for Environmental Monitoring", IGARSS 95, pp. 2157-2160, Florence, Italy, 1995.
127. Matwin, S., **Affa**, A., 1994, "Reuse of Modular Software with Automated Comment Analysis", 1994, Procs. IEEE International Conference on Software Engineering, Victoria, B.C., pp. 222-233.
128. Goodenough, D., **Charlebois**, D., Matwin, S., MacDonald, D., Thompson, A., 1994, "Queries and Their Application to Reasoning with Remote Sensing and GIS", Procs. of IGARSS-94, pp. 1199-1203, Pasadena, CA, 1994.
129. **Clark** P., **Feng** C., Matwin S., Fung K., 1994, "Improving Image Classification by Combining Statistical, Case-based, and Model-based Prediction Methods", Machine Learning Workshop, AI-94, pp. IX.1"IX.15.
130. Matwin S., **Charlebois** D., Goodenough D., 1994, "Machine Learning and Planning for Data Management in Forestry", AAAI Workshop on AI Technologies for Environmental Applications, pp. 83-90.
131. **Aha** D.W., **Lapointe** S., Ling C.X., Matwin S., 1994, "Learning Recursive Relations with Randomly Selected Small Training Sets", 11'th International Conference on Machine Learning, pp. 12-18.

132. **Pelletier B.**, **Matwin S.**, 1994, "Unsupervised Learning of Planning Knowledge", Procs. of AI'94, Banff, pp. 107-114.
133. **Delisle S.**, **Barker K.**, **Delannoy J.F.**, **Matwin S.**, **Szpakowicz S.**, "From Text to Horn Clauses: Combining Linguistic Analysis and Machine Learning", Procs. of AI'94, pp. 9-16, 1994.
134. **Delannoy J-F.**, **Copeck T.**, **Feng C.**, **Matwin S.**, **Szpakowicz S.**, 1994, "Du texte aux clauses de HORN par combinaison d'analyse linguistique et d'apprentissage symbolique", Comptes rendues des 3èmes journées francophones de l'acquisition des connaissances , pp. L1-L14.
135. **Aha D.**, **Lapointe S.**, **Ling C.**, **Matwin S.**, "Learning Singly Recursive Relations from Small Datasets", Procs. of the 2nd European Conference on Machine Learning, pp. 31-48, 1994.
136. **Charlebois D.**, **Goodenough D.**, and **Matwin S.**, 1993, "Machine learning from remote sensing analysis" Proceedings IGARSS (International Geoscience and Remote Sensing Symposium), Tokyo, Japan, August 18-21 1993, Volume 1, pp. 165-172.
137. **Feng C.**, **Copeck T.**, **Matwin S.**, **Szpakowicz S.**, 1994, "Semantic Clustering Acquisition of Partial Ontologies From Public Domain Lexical Sources: First Experiments", Procs. of the 1994 Banff Knowledge Acquisition Workshop.
138. **Ling C.**, **Lapointe S.**, **Matwin S.**, 1993, "Constructive Inductive Logic Programming", Procs. of the 10th Int'l Joint Conf on AI IJCAI-93, Chambéry, France, pp. 1030-1035, 1993.
139. **Fouqué G.**, **Matwin S.**, 1993, "Composition Software Reuse with Case-Based Reasoning", Procs. of 9th IEEE Conf. on AI for Applications, Orlando, pp. 128-134.
140. **Aha D.**, **Ling C.**, **Matwin S.**, **Lapointe S.**, 1993, "Learning Singly-Recursive Relations from Small Datasets", Proc. IJCAI-93 Workshop on Inductive Logic Programming.
141. **Fouqué G.**, **Matwin S.**, 1993, "Composition Software Reuse with Case-Based Reasoning", Procs. of 9th IEEE Conf. on AI for Applications, Orlando, pp. 128-134.
142. **Jetzelsperger R.**, **Matwin S.**, **Oppacher F.**, 1993, "Enhancing Reuse of Smalltalk Methods by Conceptual Clustering ", Proc. of the IEEE Int'l Conf. on Tools with AI, pp. 108-112.
143. **Bergadano P.**, **Matwin S.**, 1993, "Using Qualitative Models to Guide Inductive Learning", 10th Int'l. Conf. on Machine Learning, Amherst, MA, pp. 49-56.
144. **Delannoy J.F.**, **Feng C.**, **Matwin S.**, **Szpakowicz S.**, 1993, "Knowledge Extraction from Text", Procs. of the 1st Workshop on Machine Learning Techniques for Text Analysis, Vienna pp. 1-8.

145. **Matwin S.**, Szpakowicz S., 1993, "Text Analysis: How Can Machine Learning Help", Procs. of PACLING93, Vancouver, pp. 33-42.
146. **Clark P.**, **Matwin S.**, 1993, "Learning Decision Theories from Abstract Background Knowledge", Procs. of the European Conf. on Machine Learning, pp. 360-365.
147. **Fouqué G.**, **Matwin S.**, 1993, "Une réalisation du logiciel par composition adaptative: une application réelle du raisonnement à partir de cas", Journées Francophones de l'apprentissage, St. Raphael.
148. **Ould-Brahim, H.**, **Matwin, S.**, 1992, "Reusing Database Queries in Analogical Domains", Procs. of Knowledge-Based Software Engineering-7, Tysons Corner, pp. 80-89.
149. **Fouqué, G.**, **Matwin, S.**, "CAESAR: A System for Case-based Software Reuse", Procs. of Knowledge-Based Software Engineering-7, Tysons Corner, pp. 90-99, 1992.
150. Langley, P., Allen, J., **Matwin, S.**, 1992, "Learning Knowledge and Regularity in Planning", AAAI Spring Symposium Series, Stanford University, pp. 7-12.
151. **Lapointe, S.**, **Matwin, S.**, 1992, "Sub-unification: A Tool for Efficient Induction of Recursive Programs", Procs. of the 8th International Machine Learning Conference, pp. 273-280.
152. **Matwin, S.**, **Pelletier, B.**, 1992, "Building Macros in Deterministic and Non-Deterministic Domains", Procs. of the CSCSI92, pp. 17-21.
153. Goodenough, D., **Charlebois, D.**, **Matwin, S.**, Robson, M., 1992, "A Planning-based Software Reuse System", 5th Int'l Symp. on AI, pp. 223-232.
154. **Lapointe, S.**, **Matwin S.**, 1992, "Induction de programmes logiques récursifs fondée sur la sous-unification", 1ères journées francophone de l'apprentissage, pp. 3-14.
155. Charlebois, D., Deguise, JF., Goodenough, D., **Matwin, S.**, - "A Case –based Planner to Automate Re-use of ES Software for Analysis of Remote Sensing Data", IGARS, Vol. 3 21991, pp. 1851-1854.
156. **Affa, A.**, **Matwin, S.**, **Ould-Brahim, H.**, 1991, Acquiring The Second Tier: An Experiment In Learning Two-Tiered Concepts, Procs. of the Multi-strategy Learning Workshop, Harpers Ferry, WV, pp. 419-426.
157. **Matwin, S.**, **Plante, B.**, 1991, A Deductive-Inductive Method For Theory Revision, Procs. of the Multi-strategy Learning Workshop, Harpers Ferry, WV, pp. 160-174.
158. **Matwin, S.**, Machine Learning Applications to Software Reuse, 1991, IJCAI Workshop in AI in Design, Sydney, pp. 185-191.
159. **Delisle, S.** **Matwin, S.**, **Zupan, L.**, 1991, Explanation-based Learning Helps Acquire Knowledge from Natural Language Texts, to appear in Procs. of the Sixth International Symp. on Methodologies for Intelligent Systems, Charlotte, pp. 326-337.

160. Matwin, S., Oppacher, F., **O'Reilly**, U.-M., **Pelletier**, B., 1991, Unsupervised Learning of Design Rules Aided by System-derived Heuristics, First Int'l Conference on AI in Design, Edinburgh, pp. 269-280.
161. Gick, M., Matwin, S., "The Importance of Casual Structure and Facts in Evaluating Explanations", Procs of the ICML 1991, pp. 51-54.
162. **Plante**, B. and Matwin, S., Learning of Flexible Concepts with Theory Revision, Procs. of the Fifth International Symp. on Methodologies for Intelligent Systems, Knoxville, Tennessee, pp. 286-294.
163. **Genest**, J., Matwin, S., Building System Specifications Using Explanation-based Learning with Incomplete Theory, Procs. of Canadian Society for Computational Studies of Intelligence'90, Ottawa, pp. 169-176, 1990.
164. **D'Alché**, F., Koperczak, Z., Matwin, S., Learning Financial Concepts from Explanations with the use of NEGOPLAN, Procs. of the 2nd International Conference on Economics and Artificial Intelligence, Paris, pp. 305-310, 1990.
165. **Genest**, J., Matwin, S., **Plante**, B., Explanation-based Learning with Incomplete Theory, Proceedings of the 6th International Conference on Machine Learning, Austin, pp. 286-294, 1990.
166. Matwin, S., Machine Learning for Software Reuse, Proceedings of the CIPS/CATA Congress'90, pp. 375-376, Ottawa, 1990.
167. **Salembier**, M., Matwin, S., **d'Alché**, F., Explanation-based Learning of Disjunctive Concepts with Non-Horn Clauses, Selected papers of the Fifth International Symp. on Methodologies for Intelligent Systems, Knoxville, Tennessee, pp. 203-213, 1990.
168. Matwin, S., Szpakowicz, S., Koperczak, Z., NEGOPLAN: An Inference-based Negotiation Support Tool, Proceedings of IFIP'89, 11th World Computer Congress, San Francisco, pp. 679-686, 1989.
169. Matwin, S., **Morin**, J., Learning Procedural Knowledge in the EBG Context, Proceedings of the 6th International Workshop on Machine Learning, Ithaca, pp. 197-199, 1989.
170. Matwin, S., Szapiro, T., A Machine Learning, Genetics-based Support for a Bargaining Problem, Proceedings of Multiple Criteria Decision Making, Bangkok, pp.435-449, 1989.
171. Matwin, S., Szapiro, T., Genetic Algorithms for Negotiation Support, Proceedings of Applications of AI in Management, Warsaw (in Polish), pp. 10-16, 1989.
172. Matwin, S., Oppacher, F., Knowledge Acquisition Using a Machine Learning System with User-Limited Autonomy, Procs. of IJCAI'89 Workshop on Knowledge Acquisition, Detroit, 1989.

173. Bergadano, F., Matwin, S., Michalski, R.S., Zhang, J., Learning Flexible Concepts through a Search for Simple but Still Accurate Descriptions, Proceedings of Knowledge Acquisition for Knowledge-Based Systems Workshop, Banff, pp. 4.1-4.10, 1989.
174. Michalowski, W., Kersten, G., Koperczak, Z., **Matwin, S.**, Szpakowicz, S., Negotiation with a terrorist: can an expert system help”, Procs. of the 1st International. IMACS/IFORS Colloquium on Managerial DSS and Knowledge-Based Systems, pp. 193-200, Springer Verlag, 1988.
175. **Constant, P.**, Matwin, S., Oppacher, F., LEW_P: Learning by Watching in the Planning Domain, Proceedings of the Canadian Society for Computational Studies of Intelligence'88, Edmonton, pp. 242-248, 1988.
176. Matwin, S., Oppacher, F., Learning by Watching: An Incremental Machine Learning Method that Acquires Rules by Conceptual Clustering, Procs. of the International. Symp. on Methodologies for Intelligent Systems, Torino, pp. 363-373, 1988.
177. **Constant, P.**, Matwin, S., Oppacher, F., Knowledge Acquisition for Planning Systems, Proceedings of the 8th International Workshop on Expert Systems, Avignon, pp. 553-565, 1988.
178. Bergadano, F., Matwin, S., Michalski, R.S., **Zhang, J.**, Representing and Acquiring Imprecise and Context dependent Concepts in Knowledge based Systems, invited paper, Proceedings of the International Symposium on Methodologies for Intelligent Systems, Torino, pp. 270-280, 1988.
179. Bergadano, F., Matwin, S., Michalski, R.S., **Zhang, J.**, Measuring Quality of Concept Descriptions, Procs. of the Third European Working Sessions on Learning, Glasgow, pp. 1-14, 1988.
180. **Constant, P.**, Matwin, S., Szpakowicz, S., Question-driven Approach to the Construction of Knowledge-based Software Advisor Systems, Procs of 3rd IEEE Conf. on AI Applications, Orlando, Florida, pp. 29-35, February 1987.
181. Matwin, S., **Quéant, C.**, Knowledge Acquisition by Simple Learning in a Programmer's Apprentice, Procs. of the 2nd IEEE CS International Conference on Computers and Applications, Beijing, China, pp. 38-43, June 1987.
182. Matwin, S., Kersten, G., Michalowski, W., A Rule Based System to Support Negotiations, Procs. of the 31st Meeting of the Int'l Society for General Systems Research, Budapest, pp. 610-616, 1-5 June, 1987
183. Szpakowicz, S., **Matwin, S.**, Kersten, G., Michalowski, W., RENE: An Expert System Shell for Negotiation Support, Procs. of the 3rd International Workshop on Expert Systems, Avignon, pp. 711-727, May 1987.
184. Kersten, G.E., Michalowski, W., **Matwin, S.**, Szpakowicz, S., A Rule Based Approach to Conflict Resolution in Negotiations, ASAC 1987 Conference, Toronto, vol. 8 part 4, pp. 71-82, 1987.

185. Matwin, S., Szpakowicz, S., Kersten, G., Michalowski, W., Koperczak, Z., Logic based Tools for Negotiation Support, Proceedings of the 4th IEEE Symposium on Logic Programming, San Francisco, pp. 499-506, 1987.
186. Szpakowicz, S., Matwin, S., Skuce, D., Quiz Advisor: A Consultant for a Fourth Generation Software Package, 2nd International Workshop on Expert Systems, Avignon, pp. 155-168, May 1986.
187. Matwin, S., Cox, P.H., Pietrzykowski, T., Querying Databases in LOGGRAPH, Proceedings of COMPINT'85, pp. 168-171, 1985.
188. Tazovich, B., Matwin, S., Skuce, D., Szpakowicz, S., Oppacher, F., an Expert Advisory System for Government Regulations, Procs. of IFAC-85, Zurich, North_Holland, pp. 205-212, 1985.
189. Skuce, D., Matwin, S., Tazovich, B., Szpakowicz, S., Oppacher, F., A Rule Oriented Methodology for Constructing a Knowledge Base from Natural Language Documents, Procs. of the International Conference on Expert Systems in Government, Washington, D.C., pp.378-385, October 1985.
190. Forsythe K., Matwin S., "Implementation Strategies for Plan-based Deduction", Proceedings of the 7th International Conference on Automated Deduction, Napa, CA, 1984, pp. 426-444.
191. Matwin S., Pietrzykowski T., "Exponential Improvement of Exhaustive Backtracking: Data Structure and Implementation", Procs. of the 6th International Conference on Automated Deduction, NY, NY, 1982, pp. 240-259.

Invited Keynote Addresses at International Conferences

Matwin, S. Image Processing and Machine Learning: How to Foster a Stronger Connection, 15th International Conference on Image Analysis and Processing, Italy, 2009.

Matwin, S. Privacy and Data Mining: New Developments and Challenges – Exploitation et Gestion des Connaissances, Strasbourg, 2008.

Matwin S., "Privacy-oriented Data Mining: a Dream or a Reality?" - ISMIS 2002, Lyon, June 2002.

Matwin S. "Text Mining - the Technology To Convert Text into Knowledge", CODATA 2002, Montreal, October 2002.

Technical Reports

Caropreso, M.F., Matwin, S., and Sebastiani, F., "Statistical Phrases in Automated Text Categorization. Technical Report, IEI-B4-07-2000, Istituto di Elaborazione dell'Informazione, Pisa, IT, 2000.

Morin J. and **Matwin S.**, "Incremental Learning of Procedural Constraints", Technical Report (TR-90-08), University of Ottawa, Computer Science Department, Ottawa, Ontario.

Matwin S., Szpakowicz S., Koperczak Z., Kersten G.E., Michalowski W., "NEGOPLAN: An Expert System Shell for Negotiation Support", TR-88-05, Department of Computer Science, University of Ottawa, March 1988.

Kersten G.E., Matwin S., Michalowski W., Szpakowicz S.: "Rule based Modeling of Negotiation Strategies", TR-86-20, Department of Computer Science, University of Ottawa, November 1986.

Matwin S., Skuce D., Szpakowicz S.: "Question driven Approach to the Design of a Software Advisor System", TR-86-04, Department of Computer Science, University of Ottawa, April 1986.