CURRICULUM VITAE

MATWIN, Stan
Career Highlights:

Stan Matwin is a Distinguished University Professor of Computer Science at the School of Electrical Engineering and Computer Science, University of Ottawa, where he directs the Text Analysis and Machine Learning (TAMALE) lab. 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

August 1992-	Tenured Full Professor, University of Ottawa
June 2011	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):

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), Chambery, 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, AAAI 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 Conference2001
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, AAAI, 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.,   8 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, PhD., 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. Ziying 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. Amilcar Soares, PhD, topic TBD, Brazilian "sandwich" year
2. Bruno Moreno, topic TBD, Brazil;ian "sandwich" year
3. Xuan Liu, M.Sc., Data Mining Algorithms in the Maop-Reduce Paradigm
4. Elnaz Bigdeli, PhD, topic TBD, co-supervised with B. Raahemi
5. Benjamin Wang, PhD., topic TBD, started September 2010, co-supervised with N. Japkowicz
6. Erico Neves de Souza, PhD., , started Jan. 2010
7. Farid Seifi, Semi-supervised Learning, co-supervised with N. Japkowicz and C. Drummond, Exploiting Additional Data relationships in ML, started May 2009
8. Houman Abassian, co-supervised with N. Japkowicz and C. Drummond, Bias and Variance in Machine Learning, started May 2009
9. Leanne Seaward, PhD, started January 2008, Use of Kolmogorov-Smirnov Measure in Machine Learning, currently past-proposal stage
10. 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 PRESENATIONS (2008-):

Federal University of Ceara, Fortaleza, Brazil, May 2012
Federal Univertsity 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
Universita 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 Politechnica 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 Politecnica de Madrid; Computer Science Department, Feb. 2009
Universitat Politecnica de Catalunya, Computer Systems Department, Apr. 2009
Universitat Politecnica de Catalunya, the Robotics Institute, Apr. 2009
Universitat Politecnica 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 SupportMay 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.)

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

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) i^2 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), ORDCF, $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 - 47
Papers in refereed conference proceedings – 190

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**

<u>**Books authored**</u>:

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. Esmin, A., Matwin, S., - "A Hybrid Particle Swarm Optimization Algorithm with Genetic Mutation", to appear,, International Journal of Innovative Computing Information and Control (IJICIC 2012)

2. Matwin, S., Sazonova, V., "Direct comparison between Support Vector Machine and Multinomial Naive Bayes for medical abstract classification (letter to Editor)", Journal of the American Medical Informatics Appl., doi:10.1136/amiajnl-2012-001072

3. 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`

4. Huang, J., Sayyad Shirabad, J., Matwin, S., Su, J., "Improving Multi-View Semi-supervised Learning with Agreement-based Sampling" to appear, Intelligent Data Analysis Journal.

5. 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

6. 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

7. **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.

8. Herranz, J., Matwin, S., Nin, J., Torra, V., - "Classifying Data from Protected Statistical Datasets", Computers and Security, pp.875-890.

9. 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)

10. 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

11. 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

12. **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.

13. **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.

14. **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.

15. **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)

16. **de Souza** J., Matwin S., Japkowicz, N.: "Parallelizing Feature Selection", pp. 433-456, Algorithmica 45(3): 433-456 (2006).

17. 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)

18. **Zhan**, J., Chang, L., Matwin, S., "Privacy Preserving K-nearest Neighbour Classification", I. J. Network Security 1 (1): pp. 46-51 (2005)

19. **Matwin S.,** Inductive Logic Programming: Guest Editor's Introduction, Machine Learning Journal, vol. 57, No. 3, pp. 203-204, (2004)

20. **Zhan J**., Chang L., Matwin **S.**, "Privacy-Preserving Electronic Voting", Journal of Information Security, Vol.15, pp165-180, (2004).

21. **Ouerd** M., Oommen B. and Matwin **S.,** "A formal approach to using data distributions for building causal Polytree structures", Information Sciences Journal, vol. 168, pp. 111-131, (2004).

22. **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.

23. **Morin**, J., Matwin**, S.**, "GENEX: A Tool for Testing in ILP", Software Practice and Experience, vol. 31, pp. 1003-1023, 2001.

24. **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).

25. 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).

26. Matwin**, S.**, **Rios**, R. "Learning recursive definitions in Horn-clause logic", Brazilian Computer Journal, 1(3), pp. 40-50, 1996.

27. **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.

28. Matwin, S., Mason, C., "Environmental Applications of Arificial Intelligence", IEEE EXPERT and Intelligent Systems, vol. 10 No. 6, pp. 12-13, 1995.

29. 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.

30. 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..

31. 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.

32. **Fouque** G., Matwin **S.**, 1993, "A Case-based Approach to Software Reuse", International Journal of Information Systems (Kluwer) 1, pp. 165-197.

33. **Matwin S**. and Szpakowicz S., 1992, "Machine Learning Techniques in Knowledge Acquisition from Text". THINK vol. 1(2), 37-50.

34. Bergadano, F., Matwin**, S**., Michalski, R.S., Zhang, J., "Learning Two-tiered Descriptions of Flexible Concepts", Machine Learning Journal, 1992, 8, pp. 5-43.

35. 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.

36. **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.

37. **Geldrez**, C., Matwin**, S.**, **Morin**, J., Probert, R.L., 1990, "Protocol Conformance Testing by Explanation-based Learning", IEEE Expert, 5:5, pp. 45-60.

38. Matwin**, S**. , Oppacher, F., **Constant**, P., 1989, "Knowledge Acquisition by Incremental Learning from Problem solution Pairs", Computational Intelligence, 5:2, pp. 58-66.

39. 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.

40. 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.

41. Matwin**, S**., Pietrzykowski, T., "Intelligent Backtracking in Plan based Deduction", IEEE Transactions on Pattern Analysis and Machine Intelligence, 7:6, pp. 682-692, 1986.

42. Matwin**, S**., **Forsythe**, K., "Copying Dynamic Structures in a PASCAL Environment", Software Practice and Experience, 16:4, pp. 335-340, 1986.

43. Matwin, **S**., Pietrzykowski, T., "The Programming Language PROGRAPH: A Preliminary Report", Computer Languages, 10:2, pp. 91-125, 1985.

44. Skuce, D., Matwin, **S**., Szpakowicz, S., Tauzovich, B., and Oppacher, F., "A Logic_Based Knowledge Source System for Natural Language Documents", Data and Knowledge Engineering, pp. 201-231, 1985.

45. Matwin, S.: On the Completeness of a Set of Transformations Optimizing Linear Programs. - Inf. Process. Lett. 6(5): 165-167, 1977.

46. Matwin, S.: An Experimental Investigation of Geschke's Method of Global Program Optimization. – Inf. Process. Lett. 6 (6): 177-179, 1977.

47. 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. 2. Razavi, A., De Koninck, J. Matwin, S., „Dream Description Analysis Using Text Mining Methods", submitted

Papers in Refereed Conference Proceedings (since 1985):

1. 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.
2. 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.

3. Esmin, A., Matwin, S., "Data Clustering using Hybrid Particle Swarm Optimization", Procs of IDEAL 2012, Natal, Brazil, August 29-31, to appear.

4. **Neves, E.,** Matwin, S., "Improvements to Adaboost Dynamic ", Procs. of the Canadian Artificial Inteeligence Conference, Toronto, 2012, to appear.

5. Kiritchenko, S., Matwin, S. – Most Influential Paper of CASCON 2001, Reprint – "Email Classification with Co-Training", Procs of CASCON 2011, Toronto, November 2011.

6. 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. .

7. 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.

8. 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.

9. **Klement, W.,** Wilk, S., Michalowski, W., Matwin, S., "Classifying Severely Imbalanced Data", Procs. of AI 2011 annual conference, pp. 258-264..

10. **Neves, E.,** Matwin, S., "Extending AdaBoost to Iteratively Vary Its Base Classiers", Procs, of AI 2011 annual conference, pp. 384-389.

11. 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.

12. **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.

13. **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.

14. **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.

15. **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.

16. **Frunza,** O, Inkpen, D., Matwin. S., "Building Systematic Reviews Using automatic Text Classification Techniques", COLING 2010, Bejing, August 2010, pp. 303-311.

17. **Huang, J**., Sayyad, J., Matwin, S., Su, J., "Improving Co-training with Agreement-Based Sampling", Procs. of RSCTC 2010, Warsaw, Poland, pp. 197-206.

18. 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.

19. Matwin **S.,** Privacy and Data Mining: New Developments and Challenges. Exploitation et Gestion de Connaissances, 2009, page 1 (invited paper).

20. 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.

21. Matwin, S., Image Processing and Machine Learning: How to Foster a Stronger Connection, 15the International Conference on Image Analysis and Processing, Italy, 2009, p. 7.

22. 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).

23. 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.

24. Stepien, B., Felty, A., Matwin**, S**. – "A User-oriented Display Notation for XACML Access Control". MCEtech, Montreal, May 2009, pp.53-64.

25. **Klement**, W., **Wilk**, S., Michalowski, W., Matwin, S. "Dealing with Severely Imbalanced Data", ICEC Workshop at PAKDD 2009, Bangkok, pp.14-25.

26. **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.

27. **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.

28. **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.

29. **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.

30. **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.

31. 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).

32. **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

33. **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)**.**

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35. **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.

36. **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.

37. 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.

38. **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.

39. **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.

40. **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.

41. **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.

42. **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.

43. **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.

44. **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

45. **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**.**

46. **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

47. **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.

48. **Zhan, Z.,** Matwin, S**.,** "Privacy-oriented Learning Systems", IEEE International Conference on Systems, Man, and Cybernetics, Taipei, Taiwan, October 8-11, 2006

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