

Periklis Andritsos, Associate Professor

CONTACT INFORMATION

University of West Attica
School of Engineering
Department of Informatics and
Computer Engineering
University Campus 1
Egaleo 12243
Greece

Work: +30-210-538-5814
E-mail: pandritsos@uniwa.gr

My research revolves around the discovery of structure from large datasets. I have devised a novel algorithm that cluster categorical data using information theoretic tools, which is also applied in traditional data management problems such as the decomposition of relational tables. My research has had a tremendous industrial impact as it is demonstrated by the two startup companies I co-founded and the patents that are under my name.

RESEARCH FOCI

Structure Discovery in Large Datasets: big data, database management, information systems, data mining, cluster analysis, structure discovery, entity resolution, text processing, digital humanities.
Customer Journey Analytics: customer journey mapping, process mining, event sequence analytics.

EDUCATION

University of Toronto, Toronto, Canada

Ph.D., Department of Computer Science, August 2000 to September 2004

- Thesis Topic: *Scalable Clustering of Categorical Data and Applications.*
- Supervisor: Professor Renée J. Miller

M.Sc., Department of Computer Science, September 1998 to July 2000

- Thesis Topic: *Recasting Program Reverse Engineering Through On-Line Analytical Processing*
- Supervisor: Professor Renée J. Miller

National Technical University of Athens, Athens, Greece

B.Sc., Department of Electrical and Computer Engineering, September 1993 to June 1998

- Diploma Thesis Topic: *A Tool for Parsing OLAP Queries*
- Supervisor: Professor Timos Sellis, Swinburne University, Melbourne, Australia

CURRENT ACADEMIC APPOINTMENTS

Associate Professor, University of West Attica July 2022 to present

School of Engineering
Department of Information and Computer Engineering

Associate Professor, University of Toronto July 2016 to June 2022

Faculty of Information

- Affiliations:
 - Human Centred Data Science (HCDS) Concentration (concentration liaison)
 - Information Systems & Design (ISD) Concentration

Cross-appointed Faculty (non-budgetary), Dept of Computer Science, University of Toronto
Fall 2016 to present

PREVIOUS ACADEMIC APPOINTMENTS	Visiting Professor , Athens University of Business of Economics Department of Informatics	January 2020 to July 2020
	Visiting Professor , University of Lausanne Faculty of Business and Economics	April 2019 to May 2019
	Professor , University of Lausanne Faculty of Business and Economics	August 2014 to July 2016
	• Affiliations: <ul style="list-style-type: none"> – Department of Information Systems (primary affiliation) – Laboratory of Cultures and Digital Humanities (LaDHUL) – Institute of Sports Sciences (ISSUL) 	
	Assistant Professor , University of Toronto Faculty of Information, iSchool	August 2012 to July 2014
	• Information Systems and Design, (ISD), concentration	
	Visiting Professor , T.U. Berlin Database Systems and Information Management Group (DIMA)	May 2013 to July 2013 & May 2014 to June 2014
	• Funded by the European Institute of Innovation and Technology (EIT Digital)	
	Assistant Professor , Free University of Bozen-Bolzano, Italy Faculty of Computer Science	August 2011 to July 2012
	• Centre for Information and Database Systems Engineering (IDSE)	
Assistant Professor , University of Trento, Italy Faculty of Science	July 2005 to June 2008	
• Department of Information Engineering and Computer Science		
Postdoctoral Researcher , University of Toronto Department of Computer Science	August 2004 to July 2005	
• Database Group <ul style="list-style-type: none"> – Subject: “Information-Theoretic Tools for Structure Discovery” – Supervisors: Professors Renée J. Miller and Kenneth C. Sevcik 		
INDUSTRIAL EXPERIENCE	Odaia Intelligence	March 2018 to now
	• Co-founder and Chief Technical Officer <ul style="list-style-type: none"> – Sept 2019: Pre-seed funding of \$1.7mil CAD – April 2020: Graduated from the Toronto Creative Destruction Lab – Grew the company from 4 to 17 employees in a span of two years. 	
	Thoora Inc. A Toronto-based startup specializing in news aggregation and news ranking, according to the buzz they create in the social media.	August 2008 to August 2010
	• Co-founder and Director of Research. <ul style="list-style-type: none"> – Received the Techcrunch50 (TC50) award in September 2009 as one of the top 50 start-ups. – Grew the company from 7 to 15 employees in a span of one year. 	
	Self Care Catalysts	September 2017 to February 2018
• Academic Advisor		
PROgramize	August 2016 to now	
• Technical consultant		

AWARDS

- **European Conference on Advances in Databases and Information Systems.** Best Paper Award, 2019.
- **IEEE International Conference on Data Science and Systems.** Best Paper Award, 2017.
- **IT4BI Erasmus Mundus Program** awarded 7,200 Euros to fund my visiting professorship at the Technical University of Berlin. 2013-2014.
- **TechCrunch50** awarded Thoor Inc. as one of the Top-50 best start-up companies. 2009.

- **Doctoral Symposium of the International Conference on Natural Language to Information Systems, (NLDB).** Honorary mention for the work proposed with Alessandra Giordani, PhD student at the University of Trento, Italy. 2008.
- **NSERC Canada.** Post-Doctoral funding of \$40,000 for one year. 2004-2005
- **MITACS.** MITACS. Research bursary of \$18,000 for one year. 2003-2004
- **Open Fellowship, University of Toronto.** Research bursary of \$18,000 per year for 5 years. 1998 to 2004.
- **Technical Chamber of Greece.** Award for exceptional performance during the academic year 1998-1999. 2000.
- **"Empeireikion" Foundation of Greece.** Full Fellowship of \$18,000 per year for excellence in academic studies. 2000.
- **Hellenic Canadian Association.** Award for excellence in academic studies. 1998.
- **Municipality of Athens, Greece.** Awarded each year by the Mayor of Athens as a valedictorian in the graduating class. 1988 to 1992.

GRANTS

Awarded

- [1] *SSHRC Insight Development Grants.* 2020. Received: \$10,000, as Co-Investigator, of the total \$64,872 for 1 year.
- [2] *Ontario Research Fund.* 2019. Received: \$32,000 CAD per year for 5 years.
- [3] *Faculty of Information Dean's Pilot Study and Development Grant.* Academic year 2017-2018. Received (one time amount): \$5,000 CAD.
- [4] *Microsoft Canada.* Awarded teaching grant for the academic years 2017-2018, 2018-2019, 2019-2020. Received: \$20,000 USD/year.
- [5] *NSERC Strategic Project Grant.* Co-PI. Data-Driven Knowledge Mobilization. Received: \$747,000 CAD. September 2015 to September 2019. Co-PI. Name of PI: Kelly Lyons.
- [6] *University of Lausanne, Laboratory of Culture and Digital Humanities, (LaDHUL).* Structure Discovery for Digital Humanities. Received: 50,000 CHF.
- [7] *Canada Foundation for Innovation, John R. Evans Leaders Fund, (CFI-JELF) [ex. Leaders Opportunity Fund, (LOF)].* PI. Large Scale Analysis of Textual Repositories. Equipment Funding. Received: \$69,021 CAD for 5 years.
- [8] *OKKAM FP7 Consortium.* Member of the University of Trento research team. Received 650,000 Euros for a period of two and a half years. Name of PI: Paolo Bouquet.
- [9] *Bolzano-Innsbruck-Trento (BIT) School.* Funded by the Provincial Government of Trentino Alto-Adige with 90,000 Euros per year for the period 2005-2008.

PEER REVIEWED
JOURNAL
PUBLICATIONS.
[IMPACT FACTORS
GIVEN WHEREVER
KNOWN]

Student co-authors are tagged with a ''.*

- [1] Renée J. Miller, Fatemeh Nargesian*, Erkang Zhu, Christina Christodoulakis*, Ken Q. Pu, Periklis Andritsos. Making Open Data Transparent: Data Discovery on Open Data. In *IEEE Data Engineering Bulletin*, 41(2):59-70, March 2018.
- [2] Natasha Tagasovska* and Periklis Andritsos. Distributed Clustering of Categorical Data using the Information Bottleneck Framework. In *Information Systems Journal*, (72):161-178, December 2017. [Impact factor: 7.24]
- [3] Fei Chiang, Periklis Andritsos and Renée J. Miller. Data Driven Discovery of Attribute Dictionaries. In: *Springer LNCS Transactions on Computational Collective Intelligence XXI, Special Issue on Keyword Search and Big Data*, (9630):69-96, March 2016.
- [4] Torsten Kiliyas, Alexander Löser and Periklis Andritsos. INDREX: In-database relation extraction. In: *Information Systems Journal*, (53):124-144, October-November 2015. [Impact factor: 7.24]
- [5] Periklis Andritsos, Patrick Keilty. Level-Wise Exploration of Linked and Big Data Guided by Controlled Vocabularies and Folksonomies. In: *Advances in Classification Research Online*, (24):1, January 2014.
- [6] Anna Stavrianou*, Periklis Andritsos and Nicolas Nicoloyannis. Overview and Semantic Issues of Text Mining. In: *SIGMOD Record*, 36(3):23-34, September 2007. [Impact factor: 1.67]
- [7] Periklis Andritsos and Vassilios Tzerpos. Information-Theoretic Software Clustering. In: *IEEE Transactions on Software Engineering (TSE)*, 31(2):150-165, February 2005. [Accepted for publication as one of the best papers of the *10th Working Conference on Reverse Engineering (WCRE 2003)*.] [Impact factor: 7.77]
- [8] Periklis Andritsos, Ariel Fuxman, Anastasios Kementsietsidis, Renée J. Miller and Yannis Velegrakis. Kanata: Adaptation and Evolution in Data Sharing Systems. In: *SIGMOD Record*, 33(4):32-37, December 2004. [Impact factor: 1.67]
- [9] Renée J. Miller and Periklis Andritsos. On Schema Discovery. In: *IEEE Data Engineering Bulletin*, 26(3):40-45, September 2003.
- [10] Periklis Andritsos, Ronald Fagin, Ariel Fuxman, Laura Haas, Mauricio Hernández, Howard Ho, Anastasios Kementsietsidis, Renée J. Miller, Felix Nauman, Lucian Popa, Yannis Velegrakis, Charlotte Vilarem and Ling-Ling Yan. Schema Management. In: *IEEE Data Engineering Bulletin*, 25(3):32-38, September 2002.

PEER REVIEWED
CONFERENCE AND
WORKSHOP
PUBLICATIONS.
[ACCEPTANCE RATES
GIVEN WHEREVER
KNOWN]

Student/HQP co-authors are tagged with a ''*.

- [11] **[Best paper award]** Gaël Bernard*, Periklis Andritsos. VisuELs: Visualization of Event Logs. In: *3rd International Conference on Process Mining, (ICPM), Demo track*, Eindhoven, The Netherlands. October 31-November 4, 2021.
- [12] Gaël Bernard*, Periklis Andritsos. Selecting Representative Sample Traces from Large Event Logs. In: *3rd International Conference on Process Mining, (ICPM)*, Eindhoven, The Netherlands. October 31-November 4, 2021. [Acceptance Rate: 30%]
- [13] Niel Chah*, Periklis Andritsos. The Lay of Land: Data Visualizations of the Language Data and Domains of Wikidata. In: *33rd International Semantic Web Conference, (ISWC)*, Albany, New York, USA. October 24-28, 2021. [Demo Acceptance Rate: 68%]

- [14] Gaël Bernard*, Arik Senderovich and Periklis Andritsos. Cut to the Trace ! Proces-aware Partitioning of Long-running Cases in Customer Journey Logs. In: *33rd International Conference on Advanced Information Systems Engineering, (CAiSE)*, Melbourne, Australia, June 28 July 2, 2021. [Acceptance Rate: 19%]
- [15] Gaël Bernard* and Periklis Andritsos. Truncated Trace Classifier. Removal of Incomplete Traces from Event Logs. In: *32nd International Workshop on Business Process Modeling, Development and Support, (BPMDS). In conjunction with the 32nd International Conference on Advanced Information Systems Engineering, (CAiSE)*, Grenoble, France, June 8-9, 2020. (topic theme: BPM meets data).
- [16] **[Best paper award]** Gaël Bernard* and Periklis Andritsos. Accurate and Transparent Path Prediction using Process Mining. In: *23rd European Conference on Advances in Databases and Information Systems, (ADBIS)*, Bled, Slovenia, September 8-11, 2019. [Acceptance Rate: 26%]
- [17] Gaël Bernard* and Periklis Andritsos. Contextual and Behavioral Customer Journey Discovery Using a Genetic Approach. In: *23rd European Conference on Advances in Databases and Information Systems, (ADBIS)*, Bled, Slovenia, September 8-11, 2019. [Acceptance Rate: 26%]
- [18] Gaël Bernard* and Periklis Andritsos. Discovering Customer Journeys from Evidence: A Genetic Approach Inspired by Process Mining. In: *31st International Conference on Advanced Information Systems Engineering, (CAiSE)*, Rome, Italy, June 3-7, 2019. [Acceptance Rate: 20%]
- [19] Gaël Bernard* and Periklis Andritsos. CJM-ab: Abstracting Customer Journey Maps using Process Mining. In: *30th International Conference on Advanced Information Systems Engineering, (CAiSE)*, Tallinn, Estonia, June 11-15, 2018. [Acceptance Rate: 21%]
- [20] **[Best paper award]** Bertil Chapuis, Benoît Garbinato and Periklis Andritsos. An Efficient Type-Agnostic Approach for Finding Sub-sequences in Data. In: *3rd IEEE International Conference on Data Science and Systems, (DSS)*, Bangkok, Thailand, December 18-20, 2017. [Acceptance Rate: 10%]
- [21] Matthieu Harbich, Gaël Bernard*, Pietro Berkes, Benoît Garbinato, Periklis Andritsos. Discovering Customer Journey Maps using a Mixture of Markov Models. In: *7th International Symposium on Data-Driven Process Discovery and Analysis, (SIMPDA)*, Neuchâtel, Switzerland, December 6-8, 2017.
- [22] Periklis Andritsos. Reconstructing databases: instance-based structure discovery using Reconstructability Analysis. In: *27th Annual International Conference on Computer Science and Software Engineering, (CASCON)*, Toronto, Canada, November 6-8, 2017. [Acceptance Rate: 27%]
- [23] Gaël Bernard* and Periklis Andritsos. CJM-ex: Goal-oriented Exploration of Customer Journey Maps using Event Logs and Data Analytics. In: *15th International Conference on Business Process Management, (BPM)*, Barcelona, Spain, September 10-15, 2017. [Acceptance Rate: 20%]
- [24] Gaël Bernard* and Periklis Andritsos. A Process Mining Based Model for Customer Journey Mapping. In: *29th International Conference on Advanced Information Systems Engineering, (CAiSE)*, Essen, Germany, June 12-16, 2017. [Acceptance Rate: 19%]
- [25] Gaël Bernard*, Thomas Boillat, Periklis Andritsos and Christine Legner. When Sales Routines Meet Process Mining: A Science-Based Approach To Current Challenges In Selling. In: *International Conference on Information Systems International Conference on Information Systems, (ICIS)*, Dublin, Ireland, December 11-14, 2016. [Acceptance Rate: 28%]

- [26] Bertil Chapuis, Benoît Garbinato and Periklis Andritsos. Throughput: A key performance measure of Content-Defined Chunking Algorithms. Accepted for publication. In: *IEEE 36th International Conference on Distributed Computing Systems, (ICDCS)*, Nara, Japan, June 27-30, 2016. [Acceptance Rate: 17%]
- [27] Paolo Bolzoni, Sven Helmer, Kevin Wellenzohn*, Johann Gamper and Periklis Andritsos. Efficient itinerary planning with category constraints. In: *ACM/IEEE 22nd International Conference on Advances in Geographic Information Systems (SIGSPATIAL)*, pp. 203-212, Dallas, Texas, USA, November 4-5, 2014. [Acceptance Rate: 21%]
- [28] Saeideh Hamidi, Periklis Andritsos and Sotirios Liaskos. Constructing adaptive configuration dialogs using crowd data. In: *ACM/IEEE International Conference on Automated Software Engineering (ASE)*, pp. 485-490, Västerås, Sweden, September 15-19, 2014. [Acceptance Rate: 24%]
- [29] Hoang Vu Nguyen, Emmanuel Müller, Periklis Andritsos, Klemens Böhm. Detecting correlated columns in relational databases with mixed data types. In: *ACM International Conference on Scientific and Statistical Database Management (SSDBM)*, pp. 30:1-30:12, Aalborg, Denmark, June30-July2, 2014. [Acceptance Rate: 36%]
- [30] Marie Hoffmann, Alexander Alexandrov, Periklis Andritsos, Juan Soto, Volker Markl. Composite Key Generation on a Shared-Nothing Architecture. In: *Performance Characterization and Benchmarking. Traditional to Big Data - 6th TPC Technology Conference (TPCTC)*, Collocated with the *40th International Conference on Very Large Databases, (VLDB)*, pp. 188-203, Hangzhou, China, September 1-5, 2014.
- [31] Torsten Kiliyas, Alexander Löser and Periklis Andritsos. INDREX: In-Database Distributional Relation Extraction. In: *16th International ACM CIKM Workshop on Data Warehousing and OLAP (DOLAP)*, pp. 93-100, October 2013, San Francisco, CA, USA, 2013. [Acceptance Rate 20%]. Selected as one of the best full papers.
- [32] Boris Glavic, Javed Siddique and Periklis Andritsos and Renée J. Miller. Provenance for Data Mining. In: *5th USENIX Workshop on the Theory and Practice of Provenance (TaPP)*, April 2-3, Lombard, IL, USA, 2013.
- [33] Arthur Pitman, Markus Zanker, Johann Gamper and Periklis Andritsos. Individualized Hiking Time Estimation. In: *23rd International Workshop on Database and Expert Systems Applications, (DEXA)*, pp. 101-105, September 3-7, Vienna, Austria, 2012. [Acceptance Rate: 27%]
- [34] Fei Chiang, Periklis Andritsos, Erkang Zhu and Renée J. Miller. AutoDict: Automated Dictionary Extraction [Demo]. In: *28th International Conference on Data Engineering (ICDE)*, pp. 1277-1280, Washington DC, USA, April 1-5, 2012. [Acceptance Rate: 32%]
- [35] Juozas Gordevicius*, Francisco J. Estrada, Hyun Chul Lee, Periklis Andritsos and Johann Gamper. Ranking of Evolving Stories Through Meta-Aggregation. In: *19th International Conference on Information and Knowledge Management (CIKM)*, pp. 1909-1912, Toronto, Ontario, Canada, October 26-30, 2010. [Acceptance Rate: 13%]
- [36] Vítor Estêvão Silva Souza,, Nicola Zeni, Nadzeya Kiyavitskaya, Periklis Andritsos, Luisa Mich and John Mylopoulos. Automating the Generation of Semantic Annotation Schema Using a Clustering Technique. In: *13th International Conference on Applications of Natural Language to Information Systems (NLDB)*, pp. 91-96, London, UK, June 24-27, 2008. [Acceptance Rate: 28%]
- [37] Hamid R. Motahari Nezhad, Boualem Benatallah, Fabio Casati, Regis Saint-Paul and Periklis Andritsos. Exploration of Discovered Process Views in Process Spaceship [Demo]. In: *6th International Conference on Service-Oriented Computing (ICSOC)*, pp. 724-725, Sydney, Australia, December 1-5, 2008. [Acceptance Rate: 17%]

- [38] Hamid R. Motahari Nezhad, Boualem Benatallah, Regis Saint-Paul, Fabio Casati and Periklis Andritsos. Process Spaceship: Discovering and Exploring Process Views from Event Logs in Data Spaces. In *34th International Conference on Very Large Data Bases (VLDB)*, pp. 1412-1415, Auckland, New Zealand, August 23-28, 2008. [Acceptance Rate: 12%]
- [39] Themis Palpanas, Junaid Chaudhry, Periklis Andritsos and Yannis Velegrakis. Entity Data Management in OKKAM. In: *2nd International Workshop on Semantic Web Architectures For Enterprises (SWAE)*, pp. 729-733, Turin, Italy, September 1-5, 2008.
- [40] Junaid Chaudhry, Themis Palpanas, Periklis Andritsos, Antonio Mana. Entity Lifecycle Management for OKKAM. In: *1st International Workshop on Identity and Reference on the Semantic Web (IRSW)*. Part of the *5th European Semantic Web Conference, (ESWC)*, Tenerife, Spain, June 1-5, 2008.
- [41] Periklis Andritsos and Vassilios Tzerpos. Evaluating Value Weighting Schemes in the Clustering of Categorical Data. In: *1st Workshop on Machine Learning and Intelligent Optimization (LION)*, Andalo (Trento), Italy, February 12-18, 2007.
- [42] Hamza H. Syed* and Periklis Andritsos. A Lightweight Tree Structure to Model User Preferences. In: *10th DELOS Thematic Workshop on Personalized Access, Profile Management, and Context Awareness in Digital Libraries (PersDL)*. Part of the *11th International Conference on User Modeling, (UM)*, Corfu, Greece, July 25-29, 2007.
- [43] Periklis Andritsos, Ariel Fuxman and Renée J. Miller. Clean Answers Over Dirty Databases. In: *22nd International Conference on Data Engineering (ICDE)*, Atlanta, Georgia, USA, April 3-8, 2006. [Acceptance Rate 19%]
- [44] Marco Bassetti, Massimiliano Bernabé, Manuel Borile, Cesare Desilvestro, Tarcisio Fedrizzi, Alessandra Giordani, Roberto Larcher, Alida Palmisano, Angelo Salteri, Stefano Schivo, Nicola Segata, Linda Tambosi, Roberto Valentini, Periklis Andritsos, Paolo Fontana, Andrea Malossini and Enrico Blanzieri. Validation of CFS Classification with Different Data Sources. In: *6th International Conference on Critical Assessment of Microarray Data Analysis (CAMDA)*, Durham, N.C., June 8-9, 2006.
- [45] Homayoun Dayani-Fard, Yijun Yu, John Mylopoulos and Periklis Andritsos. Improving the Build Architecture of Legacy C/C++ Software Systems. In: *8th International Conference on Fundamental Approaches to Software Engineering (FASE)*, pp. 96-110, Edinburgh, Scotland, April 4-8, 2005. [Acceptance Rate 22%]
- [46] Yijun Yu, Homayoun Dayani-Fard, John Mylopoulos and Periklis Andritsos. Reducing Build Time Through Precompilations for Evolving Large Software. In: *21st International Conference on Software Maintenance (ICSM)*, pp. 59-68, Budapest, Hungary, September 25-30, 2005. [Acceptance Rate 30%]
- [47] Periklis Andritsos, Renée J. Miller and Panayiotis Tsaparas. Information-Theoretic Tools for Mining Database Structure from Large Data Sets. In: *23rd ACM SIGMOD International Conference on the Management of Data (SIGMOD)*, pp. 731-742, Paris, France, June 13-18, 2004. [Acceptance Rate 16%]
- [48] Periklis Andritsos, Panayiotis Tsaparas, Renée J. Miller and Kenneth C. Sevcik. LIMBO: Scalable Clustering of Categorical Data. In: *9th International Conference on Extending DataBase Technology (EDBT)*, pp. 123-146, Heraklio, Crete, Greece, March 14-18, 2004. [Acceptance Rate 14%]
- [49] Periklis Andritsos and Vassilios Tzerpos. Software Clustering Based on Information Loss Minimization. In: *10th Working Conference on Reverse Engineering (WCRE)*, pp. 334-344, Victoria, B.C., Canada, November 13-16, 2003. [Selected as one of the best papers]

- and invited for peer-reviewed submission to the *IEEE Transactions of Software Engineering (TSE)* journal]
- [50] Periklis Andritsos and Renée J. Miller. Reverse Engineering Meets Data Analysis. In: *9th International Workshop on Program Comprehension, (IWPC)*, pp. 157-166, Toronto, ON, Canada, May 12-13, 2001.
- BOOK CHAPTERS
- [51] Periklis Andritsos, Igor Jurisica and Janice I. Glasgow. Case-Based Reasoning for Biomedical Informatics and Medicine. In: *Springer Handbook of Bio- and Neuroinformatics*, pp. 207-221, January 2014.
- [52] Periklis Andritsos and Panayiotis Tsaparas. Categorical Data Clustering. In *Springer Encyclopedia of Machine Learning*, Part 4, pp. 154-159, December 2010. This article gets renewed and republished every time the Encyclopedia gets published.
- CONFERENCE POSTERS
- [53] Maria-Angela Ferrario, Periklis Andritsos, Niel Chah* and Thais Bittencourt*. The Corporate Control Network Before and After the Crash: Evolution and Sustainability Implications. Poster paper. In: *International Conference on ICT for Sustainability (ICT4S)*, Toronto, Canada, May 14-18, 2018.
- [54] Niel Chah* and Periklis Andritsos. Profiling Billions of Triples Using Limited Resources: The Case of Freebase Data Dumps. Expo paper. In: *27th Annual International Conference on Computer Science and Software Engineering, (CASCON)*, Toronto, Canada, November 6-8, 2017.
- [55] Periklis Andritsos, Panayiotis Tsaparas, Renée J. Miller and Kenneth C. Sevcik. LIMBO: A Scalable Categorical Data Clustering Algorithm. In: *13th Annual International Conference on Computer Science and Software Engineering, (CASCON)*, Toronto, Ontario, Canada, October 6-9, 2003.
- [56] Periklis Andritsos, Panayiotis Tsaparas, Renée J. Miller and Kenneth C. Sevcik. Clustering Categorical Data Based on Information Maximization. In: *4th Annual MITACS Conference*, Ottawa, Ontario, Canada, May 18, 2003.
- PATENTS
- [57] Periklis Andritsos. Accurate and transparent path prediction using process mining. PCT Application.
- *European Patent Office*
 - Patent ID: EP3899757A1
 - Application Date: 2018-12-19
 - Publication Date: 2020-06-25
 - *Canadian Patent Database*
 - Patent ID: CA3123945
 - Filing Date: 2019-12-19
 - Publication Date: 2021-06-17
 - *World Intellectual Property Organization*
 - Publication Number: WO/2020/124240
 - International Application Date: 19.12.2019
 - International Application Date: 19.12.2019
 - International Application Number: PCT/CA2019/051857
- [58] Periklis Andritsos. Data visualization platform for event-based behavior clustering.
- *US Patent Office*
 - Document ID: US20210004386 A1

- Date Filed: 2020-07-13
 - Date Published: 2021-01-07
 - Application Number: 16/927902
 - Patent Number: 20210004386
 - *European Patent Office*
 - Patent ID: EP3803635A1;EP3803635A4
 - Application Date: 2018-06-11
 - Publication Date: 2019-12-19
- [59] Benoît Garbinato, Bertil Chapuis, Periklis Andritsos. Method for Segmenting and Indexing Features from Multidimensional Data.
- *US Patent Office*
 - Document ID: US20180143979 A1
 - Date Filed: 2017-11-21
 - Date Published: 2018-05-24
 - Application Number: 15/819320
 - Patent Number: 20180143979
 - *European Patent Office*
 - Patent ID: EP3324303A1
 - Application Date: 2016-11-21
 - Date Published: 2018-05-23
- [60] Michael Cvet, Periklis Andritsos, Francisco Estrada and Darius Braziunas. System and method for grouping multiple streams of data. PCT Application.
- *US Patent Office*
 - Document ID: US20110093464 A1
 - Date Filed: 2010-08-17
 - Date Published: 2011-04-21
 - Application Number: 12/587688
 - Patent Number: 20110093464
 - *European Patent Office*
 - Patent ID: EP2488970A1; EP2488970A4
 - Application Date: 2010-08-17
 - Date Published: 2011-04-21
 - *Canadian Patent Database*
 - Patent ID: CA2777506
 - Filing Date: 2010-08-17
 - Publication Date: 2010-10-18
 - *World Intellectual Property Organization*
 - Publication Number: WO/2011/044662
 - International Filing No: PCT/CA2010/001239
 - International Filing Date: 17.08.2010
 - Publication Date: 21.04.2011

INVITED TALKS

- [61] An Inside Look at Customer Journey Analytics *CSE Department, University of California at Riverside*, Riverside, California, USA, May 21, 2021.
- [62] Summarizing and Clustering Categorical Data with Applications *Thomson-Reuters, Centre for AI and Cognitive Computing*, Toronto, Canada, March 22, 2019.
- [63] STARTUPS: Challenges and Opportunities in Data and AI. *The Fields Institute for Research in Mathematical Sciences*, Panel on "Industry Day: Statistical Inference, Learning and Models in Data Science", Toronto, Canada, September 28, 2018.
- [64] Studying the Past Through Technology: An Interdisciplinary Roundtable. *Digital Curation Institute, Faculty of Information, University of Toronto*, Toronto, Canada, March 15, 2017.
- [65] Data Driven Discovery of Attributes. *Expedia Competitive Intelligence Group*, Geneva, Switzerland, January 15, 2016.
- [66] Data Driven Discovery of Attributes. *Faculty of Computer Science, Free University of Bozen-Bolzano*, Bolzano, Italy, December 15, 2015.
- [67] Big Data Challenges, Opportunities and Avenues of Research, or How did I grow up talking to data. *Laboratoire de cultures et humanités digital de l'UNIL, (LaDHUL)*, November 24, 2014.
- [68] Big Data, A New Era of Opportunities. *University of Oxford Internet Institute (OII) Summer Doctoral Programme (SDP)*, University of Toronto, ONT, Canada. Invited presentation and participation in an experts panel, July 8, 2013.
- [69] Finding and Extracting Structure in Large Data Sets. *Database Systems and Information Management Group, (DIMA), Colloquium Series*, Technical University of Berlin, Berlin, Germany, June 13, 2013.
- [70] Finding and Extracting Structure in Large Data Sets. *Database and Information Systems, (DBIS), Seminar Series*, Humboldt University, Berlin, Germany, June 12, 2013.
- [71] Big Data, Challenges, Opportunities and Avenues of Research. *iSchool, University of Toronto*, Toronto, ONT, Canada, March 21, 2013.
- [72] Big Data, Opportunities and Challenges for Pharma. *Canadian Market Research Conference*, Keynote Talk, Toronto, ONT, Canada, April 4th, 2013.

IN THE NEWS

- [73] Data storage a weak spot for Canadian businesses, experts say. *Chartered Professional Accountants Canada*, February 20, 2020.
- [74] 'Just walk away from it': The scary things companies like FaceApp can do with your data. *Global News*, July 19, 2019.
- [75] New Jays manager a 'blend of old school and analytics'. *CityNews*, October 29, 2018.
- [76] Google is linking secret, court-protected names - including victim IDs - to online coverage. *Ottawa Citizen*, September 9, 2018.
- [77] Le process mining appliqué aux ventes. *ICTJournal*, April 10, 2017.
- [78] L'informatique décisionnelle, un atout pour les PME? *Confédération Suisse, Portail PME*, June 3, 2015.
- [79] Crunching 2012 Google search trends: data analysis expert. *University of Toronto News*, December 20, 2012.

- WORK IN PROGRESS [80] Gaël Bernard and Periklis Andritsos. visuEL: informative exploration of event logs using sampling. The implementation of an extension of CJM-ex is being finalized.
- [81] Niel Chah* and Periklis Andritsos. WikiMetaData Studio: Dashboards From Data Profiling the Languages, Properties, and Items of Wikidata. In submission to: *Wikidata Workshop 2021, co-located with the 20th International Semantic Web Conference*.
- [82] Chun Lee, Arik Senderovich, Gaël Bernard and Periklis Andritsos. Changepoint Detection using Variational-RNN with Adversarial Training. In preparation. Chun Lee's work under my supervision during his MI thesis.
- [83] Liwen Lu and Periklis Andritsos. Improving Event Extraction from Text Using Abstract Meaning Representation and Graph Embedding. In preparation. Liwen Lu's work under my supervision during her MSc thesis.

ACADEMIC SERVICE University Service (University of Toronto):

- **Advisory Committee for the Dean.** Member of the committee on the appointment of a new Dean of the Faculty of Information. 2020-2021.
- **Advisory Committee for the Dean.** Member of the committee on the appointment of a new Dean of the Faculty of Information. 2018-2019.

Faculty of Information (iSchool):

- **Faculty Search Committee.** Member of the search committee for a new professor of Data Science at the Faculty of Information. 2020.
- **Faculty Search Committee.** Member of the search committee for a new professor in a shared role between the Faculty of Information and the Department of Statistics. 2018-2019 and 2019-2020.

Humber Institute of Technology & Advanced Learning:

- **Program Advisory Committee for Business Insights & Analytics.** Committee member. 2020-2023.

Department of Information Systems, University of Lausanne:

- **Faculty Search Committee.** While a Faculty member at the University of Toronto, member of the search committee for a new professor specializing in Big Data and Analytics. 2018-2019.

PROFESSIONAL SERVICE

Conference Organization:

- Research Project Advisor: Toronto Human-AI Interaction Summer Research School. Faculty of Information, University of Toronto. Summer 2021.
- Co-chair: 4th Annual Workshop on Data-Driven Knowledge Mobilization, CASCON 2019, Toronto, Canada.
- Best Paper Awards Committee member: 2018 30th International Conference on Scientific and Statistical Database Management (SSDBM).
- Best Paper Awards Committee member: 2017 International Conference on Computer Science and Software Engineering (CASCON).
- Panels Chair: 2017 Joint Conference on Digital Libraries (JCDL).
- Tutorials Chair: 2017 19th International Conference on Extending Database Technology (EDBT).
- Registration Chair: 2013 International Conference on Very Large Databases (VLDB).
- Local Organization Committee: 2004 International Conference on Very Large Databases (VLDB).

Program Committees:

- 2020 International Conference on Data Science and Advanced Analytics (DSAA).
- 2019 International Conference on Extending Database Technology (EDBT).

- 2018 International Conference on Scientific and Statistical Database Management (SS-DBM).
- 2017 International Conference on Extending Database Technology (EDBT).
- 2018 International Conference on Data Engineering (ICDE).
- 2017 International Conference on Computer Science and Software Engineering (CAS-CON).
- 2017 Canadian Artificial Intelligence Conference (CAI).
- 2017 International Conference on Networked Systems (NETYS).
- 2016 International Conference on Data Mining (ICDM).
- 2015 European Conference on Information Systems (ECIS).
- 2015 Canadian Artificial Intelligence Conference (CAI).
- 2015 International Conference on Advanced Information Networking and Applications (AINA).
- 2015 International Conference on Information and Knowledge Management (CIKM).
- 2014 International Conference on Data Mining (ICDM).
- 2014 International Conference on Extending Database Technology (EDBT).
- 2014 International Conference on Information and Knowledge Management (CIKM).
- 2013 International Conference on Data Mining (ICDM).
- 2011 International Conference on the Management of Data (SIGMOD).
- 2011 International Conference on Extending Database Technology (EDBT).
- 2008 International Conference on Very Large Data Bases (VLDB).
- 2008 International Workshop on Web Information and Data Management (WIDM).
- 2008 International Conference on Data Mining (ICDM).
- 2007 International Conference on Knowledge Discovery and Data Mining (KDD).
- 2007 International Conference on Scientific and Statistical Data Management (SSDBM).
- 2007 East-European Conference on Advances in Databases and Information Systems (ADBIS).
- 2006 International Conference on Web Information Systems Engineering (WISE).
- 2006 International Conference on Knowledge Discovery and Data Mining (KDD).

DOCTORAL STUDENT Faculty of Information, University of Toronto:

SUPERVISION

- **Niel Chah.** September 2017-present.
 - Thesis title: *Knowledge Graph Embeddings and Machine Learning for International Crowdsourced Knowledge Graphs*
- **Mirai Gendi.** September 2020-present.
 - Thesis title: *Process Mining in Cybersecurity*

Department of Computer Science, University of Toronto:

- **Fatemeh Nargesian.** Co-supervision with Professor Renée J. Miller. 2012-2019.
 - Thesis title: *Taxonomy-Driven Concept Discovery*.
 - Currently assistant professor at the University of Rochester.
- **Christina Christodoulakis.** Co-supervision with Professor Renée J. Miller. 2016-2019.

Department of Information Systems, University of Lausanne:

- **Natasha Tagasovska.** 2015-2020.
 - Thesis title: *An information-theoretic perspective on trustworthy machine learning*.
 - Currently senior data scientist at Swiss Data Science Center.
- **Gaël Bernard.** 2015-2020.
 - Thesis title: *Process Mining-based Customer Journey Analytics*.
 - PostDoc at the University of Toronto, Faculty of Information, started in February 2021.

Faculty of Computer Science, Free University of Bozen-Bolzano:

- **Daniel Taliun.** *Algorithms for Recognizing Regular DNA Sequences.* Co-supervision with Professor Johann Gamper. 2011-2012.

Department of Information Engineering and Computer Science, University of Trento:

- **Hamza Syed Hydri.** *Modeling Preferences Using Tree Structures*. 2005-2008.
- **Alessandra Giordani.** *Structural Mapping Between Natural Language Questions and SQL Queries*. Runner-up in the PhD Symposium of the 2008 International Conference on Applications of Natural Language to Information Systems, (NLDB). 2006-2008.

MASTER STUDENT Faculty of Information, University of Toronto:

SUPERVISION

- **Justin Lee.** January 2021-present.
 - Thesis title: TBD.

	Department of Computer Science, University of Toronto:	
	<ul style="list-style-type: none"> • Liwen Lu. 2018-2020. <ul style="list-style-type: none"> – Thesis title: <i>Improving Event Extraction With Abstract Meaning Representation and Graph Embedding</i> – Currently Software Engineer at Google Canada. 	
	Department of Information Systems, University of Lausanne:	
	<ul style="list-style-type: none"> • Ivano Maggini. <i>Implémentation d'un dashboard dans une solution pour la gestion de la prévoyance en Suisse.</i> 2015-2016. • Sandra Culman. <i>Renewable Energy Network Analysis.</i> 2015. • Jad Al Abbas. <i>Selecting a Front-End Tool for Business Intelligence in a Pharmaceutical Company.</i> 2015. • Fabrice Dettwiler. <i>Data Monetization: A Practical Example. Providing Business Intelligence from the Bottom of the Pyramid Market to FMCGs.</i> 2014-2015. 	
	Faculty of Computer Science, Free University of Bozen-Bolzano:	
	<ul style="list-style-type: none"> • Gytis Tumas. <i>A Heuristic Algorithm for Planning Tourist Itineraries.</i> Co-supervision with Professor Johann Gamper. 2011-2012. 	
UNDERGRADUATE STUDENT SUPERVISION	Faculty of Computer Science, Free University of Bozen-Bolzano:	
	<ul style="list-style-type: none"> • Manuel Stuefer and Kevin Wellenzohn. Supervision of BSc thesis. 2011-2012. 	
INTERNSHIP SUPERVISION	Thoora Inc.:	
	<ul style="list-style-type: none"> • Juozas Gordevicius. PhD Internship while doing his PhD at the Free University of Bozen-Bolzano. 2010-2011. 	
EXTERNAL EXPERT IN PHD EXAMS	University of Alberta, Department of Computing Science:	
	<ul style="list-style-type: none"> • Maryam Mirzaei <ul style="list-style-type: none"> – External PhD Examiner. – Thesis topic: Aspect-based Recommendations. – Supervisor: Eleni Stroulia. 	June 2021
	United Arab Emirates, College of Information Technology:	
	<ul style="list-style-type: none"> • Eileen Marie Hanna <ul style="list-style-type: none"> – External PhD Examiner. – Thesis topic: Mining Biological Networks Towards Protein- Complex Detection And Gene-Disease Association. – Supervisor: Nazar Zaki. 	September 2015
DOCTORAL STUDENT COMMITTEE MEMBER	Department of Computer Science, University of Toronto:	
	<ul style="list-style-type: none"> • Mahsa H. Sadi <ul style="list-style-type: none"> – Member of the final PhD examination committee. – Thesis topic: Assisting with API Design through Reusing Design Knowledge. – Supervisor: Eric Yu. • Jian Du <ul style="list-style-type: none"> – Member of the final PhD examination committee. – Thesis topic: On Physical Design and Materialization in Scalable Data Management. – Supervisor: Renée J. Miller. • Fei Chiang <ul style="list-style-type: none"> – Member of the final PhD examination committee. – Thesis topic: Data Quality Through Active Constraint Discovery and Maintenance. – Supervisor: Renée J. Miller. • Daniela Rosu <ul style="list-style-type: none"> – Member of the final PhD examination committee. 	October 2019 August 2012 August 2012 December 2012

- Thesis topic: Practical Ontologies: Requirements, Design and Applications to Semantic Integration and Knowledge Discovery.
- Supervisor: Igor Jurisica (Ontario Cancer Institute).
- **Patricia Rodriguez-Gianolli** March 2013
 - Member of the final PhD examination committee.
 - Thesis topic: Embracing Incompleteness in Schema Mappings.
 - Supervisor: Renée J. Miller.
- **Mohammad Sadoghi Hamedani** April 2013
 - Member of the final PhD examination committee.
 - Thesis topic: An Efficient, Extensible, Hardware-aware Indexing Kernel.
 - Supervisor: Hans Arno Jacobsen.
- **Christian Muise** January 2014
 - Member of the final PhD examination committee.
 - Thesis topic: Exploiting Relevance to Improve Robustness and Flexibility in Plan Generation and Execution.
 - Supervisors: Sheila McIlraith and Chris Beck.

MASTER STUDENT Department of Computer Science, University of Toronto:

COMMITTEE
MEMBER

- **Scott Brisson** January 2020
 - MSc 2nd reader.
 - Thesis topic: We are Family: Analyzing Communication in Github Software Repositories and their Forks.
 - Supervisor: Kelly Lyons.
- **Kathy Ge** June 2018
 - MSc 2nd reader.
 - Thesis topic: Predicting Expertise Level in Online Forums.
 - Supervisor: Kelly Lyons.
- **Erkang Zhu** January 2016
 - MSc 2nd reader.
 - Thesis topic: Searching Open Data.
 - Supervisor: Renée J. Miller.

CURRICULUM
PARTICIPATION

Faculty of Information, University of Toronto:

- *Human-Centred Data Science*. Put forward and developed courses and major modifications for new concentration within the Faculty. The concentration started being offered in the Fall of 2019.

Department of Information Engineering and Computer Science, University of Trento:

- *Professional Master Degree in Technologies for e-Government*. Introduced the MSc program, acquired funding from the University, designed the curriculum and participated in the advisory board.
- *Professional Master Degree in Human Language Technologies and Interfaces*. Introduced the MSc program, acquired funding from the University, designed the curriculum and participated in the advisory board.

TEACHING
EXPERIENCE

Main courses taught at the Faculty of Information, University of Toronto, since 2016:

Term	Course # & name	Enrol.	Type	Revision Level	Delivery & hours/week
Fall 2016	INF2190: Data Analytics: Introduction, Methods and Practical Approaches	L0101: 41	Elec.	Major revisions	Lecture 3 h/w
Fall 2016	INF2190: Data Analytics: Introduction, Methods and Practical Approaches	L0102: 30	Elec.	Major revisions	Lecture 3 h/w
Win. 2017	INF1343H: Data Modeling and Database Design	L0101: 57	Req.	Minor revisions	Lecture 3 h/w
Win. 2017	INF1343H: Data Modeling and Database Design	L0102: 11	Req.	Minor revisions	Lecture 3 h/w
Fall 2017	INF2190: Data Analytics: Introduction, Methods and Practical Approaches	L0101: 30	Elec.	Minor revisions	Lecture 3 h/w
Fall 2017	INF2190: Data Analytics: Introduction, Methods and Practical Approaches	L0102: 38	Elec.	Minor revisions	Lecture 3 h/w
Win. 2018	INF1343H: Data Modeling and Database Design	L0101: 78	Req.	Minor revisions	Lecture 3 h/w
Win. 2018	INF1343H: Data Modeling and Database Design	L0102: 17	Req.	Minor revisions	Lecture 3 h/w
Fall 2019	INF2190H: Data Analytics: Introduction, Methods and Practical Approaches	L0101: 67	Req.	Minor revisions	Lecture 3 h/w
Fall 2019	INF2190H: Data Analytics: Introduction, Methods and Practical Approaches	L0102: 67	Req.	Minor revisions	Lecture 3 h/w
Win. 2020	Pre-tenure research-only term				

Term	Course # & name	Enrol.	Type	Revision Level	Delivery & hours/week
Fall 2020	INF2190H: Data Analytics: Introduction, Methods and Practical Approaches	L0101: 58	Req.	Minor revisions	Online 3 h/w
Fall 2020	INF2190H: Data Analytics: Introduction, Methods and Practical Approaches	L0102: 22	Req.	Minor revisions	Online 3 h/w
Win. 2021	INF2190H: Data Analytics: Introduction, Methods and Practical Approaches	68	Req.	Minor revisions	Online 3 h/w
Win. 2021	INF1005H: Customer Journey Analytics	24	Elec.	New course	Online 3 h/w
Win. 2021	INF1006H: Customer Journey Analytics	25	Elec.	New course	Online 3 h/w

Other course taught:

University of Toronto

Instructor

September 2012 to present

- **INF1005-6H: iAnalytics: Crunching Data and Numbers to Mine for Knowledge**
 - Master of Information half-course.
 - Approximate enrolment 30 students.
 - Introduced the course in Spring 2013 as main instructor.
- **INF1003H: Information Systems, Services and Design**
 - Master of Information course.
 - Approximate enrolment 120 students.
- **INF1340H: Systems Analysis and Design**
 - Master of Information course.
 - Approximate enrolment 80 students.
 - Taught only in Fall 2012.
- **Database Management Systems**
 - 4rd year Bachelor course in Computer Science.
 - Approximate enrolment 120 students.
 - Taught only in the summer of 2004 as a PhD student.

Guest Lecturer

- **INF2115H: Data Librarianship** November 2012
 - Master of Information course.
 - Main instructor: Kimberly Silk.
 - Lecture: “Why Study Big Data ?”.
- **CSC434: Database Systems Technology** December 2004
 - 4th year Bachelor course in Computer Science.
 - Main instructor: Ramona Truta.
 - Lecture: “Introduction to Data Mining”.
- **Geographic Information and Mapping I** December 2004
 - MSc course in Geography.
 - Main instructor: Piotrek Gozdyra.
 - Lecture: “Spatial and Non-Spatial Databases”.

Teaching Assistant

January 1999 to September 2003

- Courses in the Department of Computer Science:
 - Information Systems Analysis and Design.
 - Database Management Systems.
 - File Structures and Data Management.

University of Lausanne

Sessional Instructor

April 2019 to May 2019

- **Web-Scale Analytics**
 - Master of Information Studies course.
 - Approximate enrolment 60 students.

Instructor

September 2014 to July 2016

- **Modèles Informatiques**
 - 1st Year Bachelor course.
 - Approximate enrolment 800 students.
 - Taught in French.
- **Business Intelligence and Analytics**
 - 2nd Year Bachelor course.
 - Approximate enrolment 500 students.
 - Introduced the course in Spring 2015 as main instructor.
 - Taught in French and English.
- **Web-Scale Analytics**
 - Master of Information Studies course.
 - Approximate enrolment 60 students.
 - Introduced the course in Fall 2014 as main instructor.
 - Taught in English.

Guest Lecturer

- **Econometrics**
 - Master course in Law and Economics.
 - Main instructor: Rafael Lalive.
 - Lecture: “A Big Data Teaser Talk”.

December 2015

Free University of Bozen-Bolzano

Instructor

September 2011 to July 2012

- **Database Systems**
 - 2nd year Bachelor course.
 - Approximate enrolment 30 students.
 - Introduced for the first time as a full year course.

University of Trento

Instructor

- **Machine Learning for Natural Language Processing and Information Retrieval** Spring 2008
 - MSc course.
 - Approximate enrolment 30 students.
 - Introduced the course in Spring 2008 as main instructor.

- **Databases and Information Systems in Bioinformatics** Spring 2007
 - MSc course in Systems Biologys.
 - Approximate enrolment 15 students.
 - Introduced the course in Spring 2007 as main instructor.
 - Taught at the Microsoft Research Centre in Trento, Italy.
- **Machine Learning** Fall 2006
 - MSc course.
 - Approximate enrolment 50 students. Highest in the MSc program.
 - Introduced the course in Fall 2006 as main instructor.

Guest Lecturer

- **Data Mining** December 2005
 - MSc course.
 - Main instructor: Enrico Blanzieri.
 - Lecture: “Clustering Techniques”.
- **Business Intelligence** November 2005
 - MSc course.
 - Main instructor: Mauro Brunato.
 - Lecture: “Introduction to Data Mining”.

National Technical University of Athens

Teaching Assistant

- **Programming Techniques** Fall 1994
 - Holding weekly tutorials and grading programming assignments.

REFEREE SERVICE

Conferences:

- ACM SIGMOD International Conference on the Management of Data.
- International Conference on Very Large Data Bases (VLDB).
- ACM SIGKDD International Conference on Knowledge Discovery and Data Mining.
- IEEE International Conference on Data Engineering (ICDE).
- IEEE International Conference on Data Mining (ICDM).
- SIAM International Conference on Data Mining (SDM).
- International World Wide Web Conference (WWW).
- International Conference on Machine Learning and Applications (ICMLA).
- International Conference on Data Warehousing and Knowledge Discovery (DaWaK).
- European Conference on Machine Learning (ECML).
- European Conference on Principles of Data Mining and Knowledge Discovery (PKDD).
- International Conference on Software Maintenance (CSM).
- Working Conference on Reverse Engineering (WCRE).

Journals:

- IEEE Transactions on Database Systems (TODS).
- IEEE Transactions on Software Engineering (TSE).
- IEEE Knowledge and Data Engineering (TKDE).
- IEEE Computers (TC).
- Information Systems (IS).
- Pattern Analysis and Machine Intelligence (TPAMI).
- Knowledge and Information Systems (KAIS).
- Records Management Journal (RM).

Workshops:

- International Workshop on Database Programming Languages (DBPL).
- International Workshop on Program Comprehension (IWPC).
- International Workshop on Web and Databases (WebDB).

- International Workshop On Information Integration on the Web (IIWEB).

Books:

- Morgan Kaufmann Publishers. *Data Mining: Concepts and Techniques* by J. Hand and M. Kamber.
- Wiley Publishers. *Introduction to Business Analytics & Big Data: From Strategic Insights to Operational Intelligence* by M. Ghoul.

EDITORIAL SERVICE • Associate Editor: 2015-2016 European Conference on Information Systems (ECIS).

OTHER EVENTS • Organizer of the **CUSO Winter School**. *Taming Big Data: From Management and Curation to Storage and Analysis*. February 1-5, 2016, Champéry, Switzerland.
 • Main Coordinator of **Computing Insights** program for high school students. University of Toronto, Departments of Computer Science and Electrical and Computer Engineering, Toronto, Canada. 2001.

PROFESSIONAL MEMBERSHIPS	Association for Computing Machinery, (ACM).	1994 to present
	Senior member of IEEE Computer Society.	1994 to present
	American Association for Artificial Intelligence, (AAA).	2004 to present
	Society of Industrial and Applied Mathematics (SIAM).	2004 to present

LANGUAGES English, French, Italian, Greek.