MANOS PAPAGELIS

YORK UNIVERSITY, LASSONDE SCHOOL OF ENGINEERING ELECTRICAL ENGINEERING & COMPUTER SCIENCE (LAS 3050) 4700 KEELE STREET, M3J 1P3 TORONTO, ON, CANADA DATA MINING LAB @ YORKU: <u>http://dminer.fecs.yorku.ca</u> Personal: <u>http://www.eecs.yorku.ca/~papaggel</u> Email: <u>papaggel@fecs.yorku.ca</u> / <u>papaggel@gmail.com</u> Tel: (+1) 416.736.2100 (ext. 44782)

RESEARCH INTERESTS

Data mining, graph mining, big data analytics, machine learning, knowledge discovery

EDUCATION

| Apr 2015 | PH.D., UNIVERSITY OF TORONTO, CANADA Department of Computer Science Thesis: Understanding and improving online social interactions and processes: methods, algorithms & applications |
|----------|--|
| Mar 2005 | M.Sc., UNIVERSITY OF CRETE, GREECE Department of Computer Science Specialization area: (a) information systems, (b) computer networks and telecommunications Thesis: Crawling the algorithmic foundations of recommendation technologies |
| Jun 2002 | B.Sc., UNIVERSITY OF CRETE, GREECE Department of Computer Science Thesis: User-based recommendation algorithms and their role in the formation of online virtual communities |

ACADEMIC APPOINTMENTS

| Jul 2021 – Present | ASSOCIATE PROFESSOR, YORK UNIVERSITY, TORONTO CANADA Lassonde School of Engineering Department of Electrical Engineering & Computer Science |
|---------------------|--|
| Jul 2016 – Jun 2021 | ASSISTANT PROFESSOR, YORK UNIVERSITY, TORONTO, CANADA Lassonde School of Engineering Department of Electrical Engineering & Computer Science |
| AUG 2015 – JUL 2016 | LECTURER & POSTDOCTORAL FELLOW, UNIVERSITY OF CALIFORNIA, BERKELEY UC Berkeley School of Information (iSchool) Professional Master of Information and Data Science (MIDS) program |
| Sep 2010 – Apr 2015 | SESSIONAL LECTURER, UNIVERSITY OF TORONTO, CANADA Department of Computer Science |

RECOGNITIONS (HONORS & AWARDS)

| Jul 2021 Jun 2020 Jun 2018 Jan 2018 | 21st IEEE INTERN. CONF. ON MOBILE DATA MANAGEMENT (IEEE MDM 2020) – Best Paper Award 19th IEEE INTERN. CONF. ON MOBILE DATA MANAGEMENT (IEEE MDM 2018) – Best Paper Award 26th ACM INTERN. CONF. ON INFORM. & KNOWL. MANAGEMENT (ACM CIKM 2017) – Outstandir | |
|--|---|--|
| AUG 2015 – JUL 2016 | Reviewer Award UNIVERSITY OF CALIFORNIA, BERKELEY – Postdoctoral Fellowship | |
| JAN 2011 | ELSEVIER ENGINEERING APPLICATIONS OF AI – Top Cited Article 2005-2010 award | |
| JAN 2011 – DEC 2012 | UNIVERSITY OF TORONTO – Platform Computing Graduate Fellowship in CS | |
| SEP 2005 – SEP 2010 | UNIVERSITY OF TORONTO – Graduate Fellowship | |
| JUN 2010 – AUG 2010 | YAHOO! RESEARCH – Research Internship Fellowship | |
| May2009 - Jul2009 | YAHOO! RESEARCH – Research Internship Fellowship | |

| $\operatorname{SEP} 2004 - \operatorname{May} 2005$ | EUROPEAN UNION - "Innovative Ideas Worth Funding" Award - Online Conference Management System |
|---|---|
| Feb 2005 – Jul 2005 | FOUNDATION OF RESEARCH & TECHNOLOGY, HELLAS (FORTH) – Training and Specialization Fellowship |
| Feb 2003 – Jan 2005 | FOUNDATION OF RESEARCH & TECHNOLOGY, HELLAS (FORTH) – Graduate Fellowship |
| Sep 2002 – Feb 2003 | FOUNDATION OF RESEARCH & TECHNOLOGY, HELLAS (FORTH) – Training and Specialization Fellowship |
| SEP 1992 – SEP 1997 | GREEK MINISTRY OF EDUCATION - Honors Award for Excellence in Education |

OTHER EMPLOYMENT HISTORY

| SEP 2017 – DEC 2020 | Co-FOUNDER, BIM2NETWORK INC. (DORMANT) BIM-based collaborative design and socio-technical analytics of green buildings | | |
|---------------------|--|--|--|
| Sep 2005 – Aug 2017 | SYSTEM ARCHITECT & ENGINEER, ONLINE SERVICE, SELF-EMPLOYED Design, development and distribution of an online conference management system (www.confious.com) | | |
| SEP 2012 – Jul 2015 | RESEARCH FELLOW AND SOFTWARE ARCHITECT, UNIVERSITY OF TORONTO, CANADA Department of Computer Science / Department of Civil Engineering Interdisciplinary research project on sustainable buildings and big data | | |
| SEP 2005 – Apr 2015 | RESEARCH FELLOW/ASSISTANT, UNIVERSITY OF TORONTO, CANADA Department of Computer Science Research interests in data mining, graph mining, databases, knowledge discovery | | |
| SEP 2005 – SEP 2010 | TEACHING ASSISTANT, UNIVERSITY OF TORONTO, CANADA Department of Computer Science Courses: introduction to databases, software engineering, web programming, information systems analysis and design computer science for the sciences, software tools and systems programming, data base management systems. | | |
| Jun 2010 – Aug 2010 | RESEARCH INTERN, YAHOO! RESEARCH, BARCELONA, SPAIN Usage Mining and Link Analysis Group Research related to (i) influence maximization in online social media, (ii) graph augmentation algorithms | | |
| May 2009 – Jul 2009 | RESEARCH INTERN, YAHOO! RESEARCH, BARCELONA, SPAIN Social Media Group Research related to (i) social influence in online social media, (ii) models of user credibility in online social media | | |
| Jun 2005 – Jul 2005 | VOLUNTEER INSTRUCTOR, MUNICIPALITY OF HERAKLION, CRETE, GREECE Course: Introduction to computing | | |
| JAN 2003 – JAN 2005 | TEACHING ASSISTANT, UNIVERSITY OF CRETE, GREECE Department of Computer Science Courses: data base management systems, web programming, business process and workflow management systems | | |
| Sep 2002 – Aug 2005 | RESEARCH FELLOW, FOUNDATION OF RESEARCH AND TECHNOLOGY HELLAS (FORTH), GREECE Institute of Computer Science (ICS), Information Systems Laboratory Research related to (i) personalization, (ii) recommendation algorithms, (iii) information integration | | |
| Ост 1999 – Sep 2001 | Co-FOUNDER & SOFTWARE ENGINEER, ATLANTIS GROUP R&D Group at the Department of Computer Science, University of Crete, Greece Design and development of web portals and mobile services | | |

RESEARCH & PROFESSIONAL AFFILIATIONS

| 2016 – Present | Member | EECS Department Faculty, Lassonde School of Engineering, York University |
|----------------|--------------|--|
| 2016 – Present | Member | Graduate Program in Electrical Engineering & Computer Science, York University |
| 2016 – Present | Member/PI | Data Mining Lab, EECS Department, York University |
| 2016 – Present | Member/Co-PI | BRAIN Alliance (Big Data Research, Analytics, Information Networks) |
| 2017 – Present | Member/Co-PI | Data Visualization and Analytics Training Program (NSERC CREATE DAV) |
| 2019 – Present | Member/Co-PI | Dependable Internet of Things Applications (NSERC CREATE DITA) |

| 2016 – Present | Member/Co-PI | Center for Innovation in Computing @ Lassonde (IC@L) |
|----------------|--------------|--|
| 2019 – Present | Member | AI at York University (AI@YorkU) |
| 2016 – Present | Member | Association for Computing Machinery (ACM) |
| 2016 – Present | Member | Institute of Electrical and Electronics Engineers (IEEE) |

PROFESSIONAL CONTRIBUTION & STANDING

PUBLICATIONS SUMMARY AND CITATION ANALYSIS (AS OF SEP 2021)

| Number of citations (by Google scholar): | 1420+ |
|--|---------------------|
| H-index (by Google scholar): | 14 |
| Number of Publications: | 45 |
| - Journal articles (peer-reviewed): | 9 |
| - Conferences papers (peer-reviewed): | 26 |
| - Workshop papers (peer-reviewed): | 5 |
| - Magazine articles (peer-reviewed): | 1 |
| - Theses: | 3 |
| - Patents (granted): | 1 |
| Number of submitted/under review: | 7 |
| - Journal articles (peer-reviewed): | 2 |
| - Conferences papers (peer-reviewed): | 1 |
| - Patents (applications): | 4 |
| Invited talks / Keynote talks | 8 |
| Software releases | 7 |
| Technical reports (non-referred) | 3 |
| Citation analysis (by Google scholar): | http://goo.gl/3bi9m |

INVITED LECTURES / KEYNOTE TALKS

| DATE | TALK TITLE | |
|----------------|---|--|
| DEC 13тн, 2020 | Keynote speaker, Research Week Event at Sharif University of Technology, International Campus (SUTIC) | |
| NOV 11TH, 2020 | Panelist, Urban Big Data and Privacy: A workshop on Built Environment Research | |
| Jul 6th, 2019 | Large-scale Mining of Dynamic Networks (Google Canada) | |
| Jun 28th, 2019 | Large-scale Mining of Dynamic Networks (NSERC CREATE Data Analytics & Visualization Summer School) | |
| Мау 28тн, 2019 | Fast and Accurate Mining of Evolving & Trajectory Networks. Keynote at the International Workshop on Dynamics On and Of Complex Networks 2019 (DOOCN-XII) | |
| Мау 9тн, 2019 | Big Data Analytics. (NSERC CREATE Dependable Internet of Things Applications, Integrative Course 2019) | |
| DEC 17TH, 2018 | Trajectory Network Mining. (University of Warwick, UK) | |
| JUL 6TH, 2018 | End-to-end Graph Analytics. (NSERC CREATE Data Analytics and Visualization Summer School) | |

LIST OF PUBLICATIONS¹

JOURNAL ARTICLES (PEER-REVIEWED)

[J11] *Babanejad, N., Davoudi, H., *Agrawal, A., An, A., & <u>Papagelis, M.</u> (2021). Customized Pre-processing for Language Representation Learning for Affective Tasks. **Submitted**.

¹ (*) An asterisk in front of a name indicates a student co-author, supervised either directly or in the scope of a research project/course.

[J10] *Pechlivanoglou, T. *Li, J, *Sun, J., *Heidari, F. & <u>Papagelis, M.</u> (2021). Epidemic spreading in trajectory networks. Accepted with minor revisions (currently under review).

[J9] *Zhao, X., <u>Papagelis, M.</u>, An, A., *Chen, B. X., Liu, J., & Hu, Y. (2021). ZIPLINE: An Optimized Algorithm for the Elastic Bulk Synchronous Parallel Model. Machine Learning (**MACH**). In Press. Accepted: Sept 3, 2021.

[J8] *Costa, E. N., *Pechlivanoglou, T. & <u>Papagelis, M.</u> (2021). OL-HEATMAP: Effective density visualization of multiple overlapping rectangles. Big Data Research journal **(BDR)**. Special Issue on Interactive Big Data Visualization and Analytics. 25(100235): 1-12. (**impact Factor: 2.673**)

[J7] *Heidari, F. & <u>Papagelis, M.</u> (2020). EVONRL: Evolving network representation learning based on random walks. Elsevier Applied Network Science (**APNS**) Journal, Vol 5, No 18, 1-38. (**Special Issue on Machine Learning with Graphs**).

[J6] *Sawas, A., *Abuolaim, A., *Afifi, M. & <u>Papagelis, M.</u> (2019). A versatile computational framework for group pattern mining of pedestrian trajectories. **GeoInformatica**, Vol. 23, Issue 4, 501-531. (**impact factor: 2.091**).

[J5] El-Diraby, T., Krijnen, T., & <u>Papagelis, M.</u> (2017). BIM-based collaborative design and socio-technical analytics of green buildings. Automation in Construction (**AiC**), 82, 59-74. (**impact factor: 4.032**).

[J4] <u>Papagelis, M.</u> (2015). Refining social graph connectivity via shortcut edge addition. ACM Transactions on Knowledge Discovery from Data (ACM TKDD), Vol. 10, Issue 2, Article No 12. (impact factor: 1.895).

[J3] <u>Papagelis, M.</u>, Das, G., & Koudas, N. (2013). Sampling online social networks. IEEE Transactions on Knowledge and Data Engineering, (IEEE TKDE) Vol. 25, Issue 3, 662-676. (impact factor: 3.438).

[J2] Doerr, M., & <u>Papagelis, M.</u> (2007). A method for estimating the precision of place name matching. IEEE Transactions on Knowledge and Data Engineering (**IEEE TKDE**), Vol. 19, Issue 8, 1089-1101. (**impact factor: 3.438**).

[J1] <u>Papagelis, M.</u>, & Plexousakis, D. (2005). Qualitative analysis of user-based and item-based prediction algorithms for recommendation agents. Engineering Applications of Artificial Intelligence (EAAI), 18(7), 781-789. (impact factor: 2.819 / Elsevier EAAI top cited article 2005-2010 award).

CONFERENCE PAPERS (PEER-REVIEWED)

[C27] Tarawneh , E. Agrawal, A., An, A., Jenkin, M. & Papagelis, M. (2020). Predicting Evoked Emotions in Conversations. Submitted.

[C26] *Babanejad, N., *Agrawal, A., Davoudi, H., An, A., & <u>Papagelis, M.</u> (2020). Affective and Contextual Embedding for Sarcasm Detection. In Proceedings of the 28th International Conf. on Computational Linguistics, pp. 225–243 (**COLING**).

[C25] *Pechlivanoglou, T., *Alsaeed, M. & <u>Papagelis, M.</u> (2020). MRSweep: Distributed in-memory sweep-line for scalable object intersection problems. In Proceedings of the 7th IEEE International Conference on Data Science and Advanced Analytics, pp. 324-333 (**IEEE DSAA 2020**).

[C24] Agrawal, A., An, A. & <u>Papagelis, M</u>. (2020). Leveraging transitions of emotions for sarcasm detection. In Proceedings of the 43rd ACM International Conference on Research and Development in Information Retrieval, pp. 1505-1508 (**ACM SIGIR 2020**).

[C23] *Babanejad, N., *Agrawal, A., An, A., & <u>Papagelis, M.</u> (2020). A comprehensive analysis of preprocessing for word representation learning in affective tasks. In Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics, pp. 5799 – 5810 (**ACL 2020**).

[C22] *Mehmood, S. & <u>Papagelis, M.</u> (2020). Learning semantic relations of geographic areas based on trajectories. In Proceedings of the 21st IEEE International Conference on Mobile Data Management, pp. 109-118 (**IEEE MDM 2020**). (best paper award).

[C21] *Pechlivanoglou, T., *Chu, V., & <u>Papagelis, M.</u> (2019). Efficient mining and exploration of multiple axis-aligned intersecting objects. In Proceedings of the 19th IEEE International Conference on Data Mining, pp. 1276-1281 (**IEEE ICDM 2019**). [C20] *Zhao, X., <u>Papagelis, M.</u>, An, A., *Chen, B. X., Liu, J., & Hu, Y. (2019). Elastic bulk synchronous parallel model for distributed deep learning. In Proceedings of the 19th IEEE International Conference on Data Mining, pp. 1504-1509 (**IEEE ICDM 2019**).

[C19] *Heidari, F. & <u>Papagelis, M.</u> (2018). EvoNRL: Evolving network representation learning based on random walks. In Proceedings of the 7th International Conference on Complex Networks and Their Applications, pp. 457-469 (**Complex Networks 2018**).

[C18] *Pechlivanoglou, T. & <u>Papagelis, M.</u> (2018). Fast and accurate mining of node importance in trajectory networks. In Proceedings of the 6th IEEE International Conference on Big Data, pp. 781-790 (**IEEE BigData 2018**).

[C17] *Agrawal, A., An, A., & <u>Papagelis, M.</u> (2018). Learning emotion-enriched word representations. In Proceedings of the 27th International Conference on Computational Linguistics, 950-961 (**COLING 2018**).

[C16] *Sawas, A., *Abuolaim, A., *Afifi, M. & <u>Papagelis, M.</u> (2018). Tensor methods for group pattern discovery of pedestrian trajectories. In Proceedings of the 19th IEEE International Conference on Mobile Data Management, pp. 76-85 (**IEEE MDM 2018**). (<u>best paper</u> <u>award</u>).

[C15] *Sawas, A., *Abuolaim, A., *Afifi, & M., <u>Papagelis, M.</u> (2018). Trajectolizer: interactive analysis and exploration of trajectory group dynamics. In Proceedings of the 19th IEEE International Conference on Mobile Data Management, pp. 286-287 (**IEEE MDM 2018**).

[C14] El-Diraby, T., Krijnen, T. F., & <u>Papagelis, M.</u> (2016). Green 2.0: socio-technical analytics of green buildings. In Proceedings of the International Conference on Smart Infrastructure and Construction, 10 pages, (**ICSIC 2016**).

[C13] <u>Papagelis, M.</u>, Krijnen, T. F., Elshenawy, M., Konomi, T., Fang, R., & El-Diraby, T. (2016). Green2. 0: enabling complex interactions between buildings and people. In Proceedings of the 19th ACM Conference on Computer Supported Cooperative Work and Social Computing Companion, pp. 77-80 (**ACM CSCW 2016**).

[C12] <u>Papagelis, M</u>. (2015). Refining social graph connectivity via shortcut edge addition. In Proceedings of the 13rd Hellenic Data Management Symposium (HDMS 2015).

[C11] Redmond, A., El-Diraby, T., & <u>Papagelis, M.</u> (2015). Employing an exploratory research stage to evaluate green building technologies for sustainable systems. In Proceedings of the International Conference on Civil, Structural and Transportation Engineering (**ICCSTE 2015**).

[C10] <u>Papagelis, M.</u>, Bonchi, F., & Gionis, A. (2011). Suggesting ghost edges for a smaller world. In Proceedings of the 20th ACM International Conference on Information and Knowledge Management, pp. 2305-2308 (ACM CIKM 2011).

[C9] <u>Papagelis, M.</u>, Murdock, V., & van Zwol, R. (2011). Individual behavior and social influence in online social systems. In Proceedings of the 22nd ACM conference on Hypertext and hypermedia, pp. 241-250 (**ACM HyperText 2011**).

[C8] <u>Papagelis, M.</u>, Bansal, N., & Koudas, N. (2009). Information cascades in the blogosphere: a look Behind the Curtain. In Proceedings of the 3rd AAAI International Conference on Web and Social Media, pp. 292-295 (**ICWSM 2009**).

[C7] Papagelis, A., <u>Papagelis, M.</u>, & Zaroliagis, C. (2008). Enabling social navigation on the web. In Proceedings of the 3rd IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology, pp. 162-168 (**IEEE WI-IAT 2008**).

[C6] Papagelis, A., <u>Papagelis, M.</u>, & Zaroliagis, C. (2008). Iclone: towards online social navigation. In Proceedings of the 19th ACM conference on Hypertext and Hypermedia, pp. 237-238 (ACM HyperText 2008).

[C5] <u>Papagelis, M.</u>, Plexousakis, D., & Nikolaou, P. N. (2005). Confious: managing the electronic submission and reviewing process of scientific conferences. In Proceedings of the 6th International Conference on Web Information Systems Engineering, pp. 711-720 (**ACM WISE 2005**).

[C4] <u>Papagelis, M.</u>, Plexousakis, D., & Kutsuras, T. (2005). Alleviating the sparsity problem of collaborative filtering using trust inferences. In Proceedings of the 3rd International Conference on Trust Management, pp. 224-239 (**iTrust 2005**). [C3] <u>Papagelis, M.</u>, Rousidis, I., Plexousakis, D., & Theoharopoulos, E. (2005). Incremental collaborative filtering for highly-scalable recommendation algorithms. In Proceedings of the 15th International Symposium on Methodologies for Intelligent Systems, pp. 553-561 (**ISMIS 2005**).

[C2] <u>Papagelis, M.</u>, & Plexousakis, D. (2004). Qualitative analysis of user-based and item-based prediction algorithms for recommendation systems. In Proceedings of the 3rd Hellenic Data Management Symposium (**HDMS 2004**).

[C1] <u>Papagelis, M.</u>, & Plexousakis, D. (2003). Recommendation based discovery of dynamic virtual communities. In Proceedings of the 15th International Conference on Advanced Information Systems Engineering, pp. 197-200 (CAiSE 2003).

WORKSHOP PAPERS (PEER-REVIEWED)

[W5] *Babanejad, N., *Agrawal, A., Davoudi, H., An, A., & <u>Papagelis, M.</u> Leveraging emotion features in news recommendations. In Proceedings of the 7th Workshop on News Recommendation and Analytics. (**INRA/ACM Recommender Systems 2019 Workshops**).

[W4] *Chen, B. X., *Sahdev, R. *Wu, D., *Zhao, X., <u>Papagelis, M.</u>, & Tsotsos, J. K. (2018). Scene classification in indoor environments for robots using context based word embeddings. In Proceedings of the IEEE International Conference on Robotics and Automation - Multimodal Robot Perception Workshop, 6 pages (**ICRA 2018 Workshops**).

[W3] Das, G., Koudas, N., <u>Papagelis, M.</u>, & Puttaswamy, S. (2008). Efficient sampling of information in social networks. In Proceedings of the 2008 ACM Workshop on Search in Social Media, pp. 67-74 (SSM/ACM CIKM 2008 Workshops).

[W2] Doerr, M., & <u>Papagelis, M.</u> (2004). Precision estimation for matching place names to a digital gazetteer. In Proceedings of the 3rd Workshop on User-centred approaches to Networked Knowledge Organization Systems/Service (**NKOS/ECDL 2004 Workshops**).

[W1] <u>Papagelis, M.</u>, & Plexousakis, D. (2004). Qualitative analysis of user-based and item-based prediction algorithms for recommendation agents. In Proceedings of the International Workshop on Cooperative Information Agents, pp. 152-166 (CIA 2004).

MAGAZINE ARTICLES (PEER-REVIEWED)

[M1] <u>Papagelis, M.</u>, & Plexousakis, D. (2006). CONFIOUS: Conference Management System with Intelligence, Power and Style. ERCIM NEWS Magazine, Vol. 64, Jan 2006.

TECHNICAL REPORTS (NON-REFEREED)

[TR3] <u>Papagelis, M.</u>, Bansal, N., & Koudas, N. (2009). Engagement and reaction in the blogosphere. Supplementary material of the article "Papagelis, M., Bansal, N., & Koudas, N. (2009). Information cascades in the blogosphere: a look behind the curtain. In Proceedings of the 3rd AAAI International Conference on Web and Social Media, pp. 292-295 (ICWSM 2009)."

[TR2] Doerr, M., & <u>Papagelis, M.</u> (2004). Description of application based on the Alexandria digital gazetteer protocol. Available online at the Alexandria Digital Library (2004).

[TR1] <u>Papagelis, M.</u>, & Plexousakis, D. (2003). Recommendation based discovery of dynamic virtual communities. Movie Recommendation System (MRS) Overview.

THESES

[T3] <u>Papagelis, M.</u> (2015). Understanding and improving online social interactions and processes: methods, algorithms & applications. Ph.D. thesis, Department of Computer Science, University of Toronto, Canada.

[T2] <u>Papagelis, M.</u> (2005). Crawling the algorithmic foundations of recommendation technologies. M.Sc. thesis, Department of Computer Science, University of Crete, Greece.

[T1] <u>Papagelis, M.</u> (2003). Study and implementation of user-based recommendation algorithms and their role in the formation of online virtual communities. B.Sc. thesis, Department of Computer Science, University of Crete, Greece.

INTELLECTUAL PROPERTY

[P5] *Quader, S., *Jaramillo, A., Mukhopadhyay, S., <u>Papagelis, M.</u>, Litoiu, M., Kalmuk, D., Mierzejewski, P. (2020). Learning-based Workload resource optimization for autonomous database management systems. Disclosure No. P202006917.

[P4] Zhao, X., <u>Papagelis, M.</u>, An, A., *Chen, B. X., Liu, J., & Hu, Y. (2020). Elastic bulk synchronous parallel model for distributed deep learning. Disclosure No. P202006939.

[P3] El-Diraby, T., <u>Papagelis, M.</u>, Krijnen, T. (2016). Systems and methods for sustainability and social interaction analysis in building information modeling. Pub. No.: WO/2019/000083. Intern. App. No.: PCT/CA2018/050779. International Filing Date: 26.06.2018.

[P2] Murdock, V., van Zowl, R., Papagelis, M. (2012). Measuring or Estimating User Credibility. US Patent App. 12/898,644, 2012.

PATENTS (GRANTED)

[P1] Murdock, V., van Zowl, R., <u>Papagelis, M.</u> (2016). Media or content tagging determined by user credibility signals". US Patent 9,529,822.

SOFTWARE RELEASES

| DATE | NAME | BRIEF DESCRIPTION | URL |
|------|------------------|---|---|
| 2020 | MRSWEEP | A distributed in-memory version of the popular sweep- line algorithm for finding axis-aligned geometric object intersections (overlaps). Implemented using MapReduce in Apache Spark. | https://github.com/tipech/mrsweep |
| 2020 | OL-HEATMAP | A novel heatmap-like visualization method for effective density visualization of the overlaps of multiple intersecting axis-aligned objects (line-segments in $1D$, rectangles in $2D$, cuboids in $3D$, etc.). | https://github.com/tipech/overlapGraph |
| 2020 | ACE 1 & ACE 2 | Two novel deep neural network language models (ACE 1 and ACE 2) for sarcasm detection. Each model extends the architecture of BERT by incorporating both affective and contextual features of text to build a classifier that can determine whether a document is sarcastic or not. | https://github.com/NastaranBa/ACE- for-Sarcasm-Detection |
| 2019 | ZIPLINE | An optimization method for materializing ElasticBSP. ElasticBSP is an efficient method for training deep learning models in a distributed environment. | https://github.com/xingzhaoo/ElasticBSP (currently confidential due to an NDA) |
| 2019 | SLIG | An efficient method for finding information about the overlaps of multiple intersecting axis-aligned objects (line-segments in $1D$, rectangles in $2D$, cuboids in $3D$, etc.). | https://github.com/tipech/overlapGraph |
| 2019 | EvoNRL | A deep learning method for obtaining continuous low- rank representations of an evolving graph/network. | https://github.com/farzana0/EvoNRL |
| 2018 | SLOT | An efficient method for profiling nodes in trajectory networks (dynamic networks defined by trajectories). Metrics include node degree, triangle membership and connected components – defined as a function of time. | https://github.com/tipech/trajectory- networks |

TEACHING (LECTURING, SUPERVISION, COMMITTEE MEMBERSHIP)

UNDERGRADUATE TEACHING

UNDERGRADUATE COURSES DEVELOPED

| TERM/YEAR | Course Code | COURSE NAME & DESCRIPTION | |
|-----------|-------------|--|--|
| Fall 2016 | EECS 4414 | INFORMATION NETWORKS Information networks are effective representations of pairwise relationships between objects. Examples include technological networks (e.g., World Wide Web), online social networks (e.g., Facebook), biological networks (e.g., Protein-to-Protein interactions), and more. The study of information networks is an emerging discipline of immense importance that combines graph theory, probability and statistics, data mining and analysis, and computational social science. This course provides students with both theoretical knowledge and practical experience of the field by covering models and algorithms of information networks and their basic properties. In addition, analysis of information networks provides the means to explore large, complex data coming from vastly diverse sources and to inform computational problems and better decisions. | |
| Fall 2016 | EECS 4415 | BIG DATA SYSTEMS Storing, managing, and processing datasets is foundational to both computer science and data science. The enormous size of today's data sets — and the specific requirements of modern applications — necessitated the growth of a new generation of data management systems, where the emphasis is put on distributed and fault-tolerant processing. New programming paradigms have evolved, an abundance of information platforms offering data management and analysis solutions have appeared, and a number of novel methods and tools have been developed. This course introduces the fundamentals of big-data storage, retrieval, and processing systems. As these fundamentals are introduced, exemplary technologies are used to illustrate how big data systems can leverage very large data sets that become available through multiple sources and are characterized by diverse levels of volume (terabytes, billion records), velocity (batch, real-time, and streaming), and variety (structured, semi-structured, and unstructured). The course aims to provide students with both theoretical knowledge and practical experience of the field by covering recent research on big-data systems and their basic properties. Students consider both small and large datasets because both are equally important and justify different trade-offs. | |

UNDERGRADUATE COURSES TAUGHT

| Course Code | COURSE NAME | TERM / YEAR |
|-------------|---------------------------|----------------|
| EECS 3421 | Introduction to Databases | W19, F19, SU20 |
| EECS 4415 | Big Data Systems | F18, F19, S21 |
| EECS 4414 | Information Networks | W18, F20 |
| EECS 2031 | Software Tools | W18 |
| | | |

GRADUATE TEACHING

GRADUATE COURSES DEVELOPED

| TERM / YEAR | COURSE CODE | COURSE NAME & DESCRIPTION |
|-------------|-------------|--|
| WINTER 2017 | EECS 6414 | DATA ANALYTICS & VISUALIZATION Data analytics and visualization is an emerging discipline of immense importance to any data-driven organization. This is a project-focused course that provides students with knowledge on tools for data mining and visualization and practical experience working with data mining and machine learning |

algorithms for analysis of very large amounts of data. It also focuses on methods and models for efficient communication of data results through data visualization.

| FALL 2016 | EECS 6413 | INFORMATION NETWORKS |
|-----------|-------------------|---|
| | (currently listed | Information networks are effective representations of pairwise relationships between objects. |
| | as EECS | Examples include technological networks (e.g., World Wide Web), online social networks (e.g., |
| | 4414/5414) | Facebook), biological networks (e.g., Protein-to-Protein interactions), and more. The study of |
| | | information networks is an emerging discipline of immense importance that combines graph theory, |
| | | probability and statistics, data mining and analysis, and computational social science. This course |
| | | provides students with both theoretical knowledge and practical experience of the field by covering |
| | | models and algorithms of information networks and their basic properties. In addition, analysis of |
| | | information networks provides the means to explore large, complex data coming from vastly diverse |
| | | sources and to inform computational problems and better decisions. |

GRADUATE COURSES TAUGHT

| COURSE CODE | COURSE NAME | Term/Year |
|----------------|----------------------------------|----------------------------------|
| EECS 6414 | Data Analytics and Visualization | F17, W19, W20, W21 |
| EECS 6413/5414 | Information Networks | W17 (Appeared As EECS 6413), F20 |

SUMMARY OF COURSE EVALUATIONS

The table below provides a summary of my course evaluations. The score reported is the score in **the overall instructor effectiveness question** of the evaluation form. The normalized score is provided (out of 100%) to improve readability/comparisons. York University's scoring is out of 7. **Detailed course evaluations are provided as separate files.**

| ACADEMIC INSTITUTION | Course Code | Course Level | SEMESTER | TOTAL STUDENT Enrolment | Normalized Score (100%) |
|-------------------------|----------------|----------------------------------|----------|----------------------------|----------------------------|
| York University | EECS6414 | Graduate | W21 | 30 | 91.1% |
| York University | EECS6414 | Graduate | W20 | 40 | 92.6% |
| York University | EECS6414 | Graduate | W19 | 24 | 87.7% |
| York University | EECS6414 | Graduate | F17 | 18 | 89.3% |
| York University | EECS6413 | Graduate | W17 | 3 | 100% |
| York University | EECS4414 | Undergraduate (4 th) | F20 | 48 | 93.9% |
| York University | EECS3421 | Undergraduate (3 rd) | SU20 | 114 | 93.4% |
| York University | EECS4415 | Undergraduate (4 th) | F19 | 44 | 94.4% |
| York University | EECS4415 | Undergraduate (4 th) | F18 | 38 | 95.0% |
| York University | EECS4414 | Undergraduate (4 th) | W18 | 8 | 100% |
| York University | EECS3421 | Undergraduate (3rd) | F19 | 98 | 90.2% |
| York University | EECS3421 | Undergraduate (3rd) | W19 | 92 | 93.0% |
| York University | EECS2031 | Undergraduate (2 nd) | W18 | 122 | ~90-100 [%] 2 |

² This range is reflecting scores in course-level questions; instructor scores were not collected that year due to union strike disruptions. MANOS PAPAGELIS – SEP'21

SUPERVISION SUMMARY (JUL 2016 - PRESENT)

| PROGRAM & DEGREE | #CURRENT | #GRADUATED | #Total |
|---|----------|------------|--------|
| EECS Ph.D. | 2 | 1 | 3 |
| EECS MSc | 4 | 5 | 9 |
| EECS M.A.Sc. | 1 | 0 | 1 |
| EECS MScAI | 0 | 0 | 0 |
| EECS Grad Research Project/Collaboration ³ | 0 | 11 | 11 |
| EECS Undergrad | 4 | 15 | 19 |
| #Total | 12 | 31 | 43 |
| | | | |

GRADUATE SUPERVISION

GRADUATE STUDENTS SUPERVISED

| DATES | STUDENT NAME | Degree | Program | THESIS TOPIC |
|------------------------|---|---------|---------|--|
| SEP 2019 - Present | Tilemachos Pechlivanoglou | Ph.D. | EECS | Machine learning with graphs (TBD) |
| SEP 2019 – Present | Shaikh Quader (Co-supervised) | Ph.D. | EECS | Machine learning models for database query optimization (TBD) |
| SEP 2017 – Dec 2020 | Nastaran Babanejad (Co-supervised) | Ph.D. | EECS | Enriching word representation learning for affect detection and affect-aware recommendations |
| SEP 2020 – Present | Mahmoud Alsaeed | M.Sc. | EECS | Deep learning models for spatiotemporal knowledge graphs (TBD) |
| SEP 2020 – Present | Andrew Nicolas Jaramillo (Co-supervised) | M.Sc. | EECS | Machine learning models for query optimization (TBD) |
| SEP 2019 – Present | Mahta Shafieesabet | M.Sc. | EECS | Mining and exploration of active components in a network of time series |
| SEP 2019 – Present | Fazel Arasteh | M.A.Sc. | EECS | Reinforcement learning for adaptive navigation of autonomous vehicles in the road network |
| SEP 2019 – Present | Ali NematiChari | M.Sc. | EECS | Online methods for evaluating the performance of road network intersections |
| May 2019 – Feb 2020 | Eric Niloy Costa | M.Sc. | EECS | Effective density visualization of multiple overlapping axis- aligned objects |
| SEP 2018 – SEP 2021 | Hoorieh Marefat (Co-supervised) | M.Sc. | EECS | Fast similarity graph construction using data sketching techniques |
| JAN 2018 – Apr 2020 | Saim Mehmood | M.Sc. | EECS | Learning semantic relationships of geographical areas based on trajectories |

³ Includes: (i) EECS6400 – Graduate Research Project course (I'm supervising a research project for 8 months that is different to MSc thesis); (ii) EECS6002 – Reading course (focused readings and research on a topic); (iii) Ad hoc research collaboration with a student.

| SEP 2017 – Aug 2019 | Tilemachos Pechlivanoglou | M.Sc. | EECS | Sweep-line extensions to the multiple object intersection problem: methods and applications in graph mining |
|------------------------|---------------------------|-------|------|---|
| SEP 2017 – Aug 2019 | Farzaneh Heidari | M.Sc. | EECS | Evolving network representation learning based on random walks |

GRADUATE STUDENT PROJECTS (EECS6002, EECS6400, RESEARCH COLLABORATIONS)

| DATES | STUDENT(S) NAME | Degree | PROGRAM | PROJECT/READING COURSE |
|------------------------|---|---------|---------|---|
| JAN 2019 – Aug 2019 | Javad Sayehvad | M.A.Sc. | EECS | EECS6400 - Distributed edge computing via k-nearest nodes in 5G networks |
| Jan 2019 – Aug 2019 | Soroush Sheikh Gargar | M.A.Sc. | EECS | EECS6400 - Trajectory-based relational inference using graph-based latent models |
| JAN 2018 – DEC 2018 | Nasim Razavi, Vincent Chu | M.Sc. | EECS | Research Collaboration – Trajectory behavior analytics |
| SEP 2017 – Apr 2019 | Abdullah Sawas, Abdullah Abuolaim, Mahmood Afifi | M.Sc. | EECS | Research Collaboration – Pedestrian trajectory group mining |
| SEP 2017 – Apr 2018 | Bao Xin Chen, Raghavender Sahdev | M.Sc. | EECS | Research Collaboration – Scene classification using context- based word embeddings |
| Apr 2017 – Aug 2017 | Shima Khoshraftar | Ph.D. | EECS | EECS6002 – Anomaly detection in dynamic and streaming graphs |
| SEP 2017 – Apr 2018 | Ali Zargar Shabestari | M.A.Sc. | EECS | EECS6400 – A genetic algorithm approach for the orienteering problem |

SUPERVISORY COMMITTEE MEMBERSHIP

| DATES | STUDENT NAME | DEGREE | Program | THESIS | ROLE |
|------------------------|---------------------------------|---------|---------|--|-----------------------|
| Mar 2021 – Present | Amirhossein Nourbakhshrezaei | Ph.D. | ESSE | Machine Learning Models for Optimization of Transportation Network Systems | Supervisory Committee |
| Mar 2021 – Present | Abhinav Tiwari | Ph.D. | EECS | Big Data Analytics for Electric Vehicle Charging Stations | Supervisory Committee |
| Aug 2020 – Present | Chenxing Zheng | M.Sc. | EECS | Question Generation in the Era of Transformers | Supervisory Committee |
| Aug 2020 – Present | Parsa Farshadfar | M.A.Sc. | EECS | Energy-efficient on-chip spiking CNN for epilepsy seizure detection using EEG signals | Supervisory Committee |
| Jul 2020 – May 2021 | Farnaz Beidokhtinezhad | M.Sc. | EECS | Malicious User Aware Client Selection for Federated Learning | Supervisory Committee |
| Jul 2020 – May 2021 | Saurabh Garg | M.Sc. | EECS | Comparative Studies of Gesture-based & Sensor-based Input Methods for Mobile Computing | Supervisory Committee |
| Nov 2019 – Present | Yifan Li | Ph.D. | EECS | Data Management Meets Machine Learning | Supervisory Committee |
| Aug 2019 – Present | Farzin Zaker | Ph.D. | EECS | Machine Learning Models for Learning End-to- end Latency of Distributed IoT Infrastructures | Supervisory Committee |

MANOS PAPAGELIS – SEP'21

| Jul 2019 – Present | Enas AlTarawneh | Ph.D. | EECS | TBD (Machine Learning, Robotics and Vision) | Supervisory Committee |
|------------------------|--------------------------|---------|------|---|-----------------------|
| Jul 2019 – Present | Hossein Pourmodheji | Ph.D. | EECS | Data Streams and Online Deep Learning | Supervisory Committee |
| Apr 2019 – Mar 2021 | Xuyang Han | M.Sc. | ESSE | Modeling Vessel Behaviors by Clustering AIS Data Using Optimized DBSCAN | Supervisory Committee |
| Sep 2017 – Present | Ali Zargar Shabestari | M.A.Sc. | EECS | Load-balancing Algorithms for Managing Distributed IoT Resources and Infrastructures | Supervisory Committee |
| SEP 2017 – Apr 2019 | Dekun (Jack) Wu | M.Sc. | EECS | Deep Learning Approach to Open-domain Factoid Question Answering from Knowledge Graph | Supervisory Committee |
| SEP 2017 – Aug 2019 | Yangguang Li | M.Sc. | EECS | Optimizing Python Applications' Performance via Configuration Tuning | Supervisory Committee |
| Sep 2017 – Present | Shima Khoshrafta | Ph.D. | EECS | Graph Embedding Methods | Supervisory Committee |
| SEP 2017 – May 2018 | Ameeta Agrawal | Ph.D. | EECS | Enriching Affect Analysis Through Emotion and Sarcasm Detection | Supervisory Committee |

EXAMINING COMMITTEE MEMBERSHIP

| DATES | STUDENT NAME | Degree | Program | THESIS | ROLE |
|----------|-------------------------|--------|---------|---|--------------------------------------|
| May 2021 | Ali Nasehzadeh | M.Sc. | EECS | A Deep RL-based Caching Strategy for Internet of Things Networks with Transient Data | Chair, Examining Committee |
| Apr 2021 | Mahmoud Afifi | Ph.D. | EECS | Image Color Correction, Enhancement, and Editing | Chair, Examining Committee |
| Apr 2021 | Aman Ullah | M.Sc. | ESSE | Towards the Interoperability of BIM and GIS data using Semantic Web Technology | Internal, Examining Committee |
| SEP 2020 | Boyuan Chen | Ph.D. | EECS | Improving the logging practices in DevOps | Chair, Examining Committee |
| SEP 2019 | Mahdi Biparva | Ph.D. | EECS | Top-Down Selection in Convolutional Neural Networks | Chair, Examining Committee |
| Aug 2019 | Kang Zhao | M.Sc. | ESSE | Using Deep Neural Networks for Automatic Building Extraction with Boundary Regularization from Satellite Images | Internal, Examining Committee |
| MAY 2018 | Forouqsadat Khonsari | M.Sc. | EECS | Mining Large-Scale News Articles for Predicting Forced Migration via Machine Learning Techniques | Chair, Examining Committee |
| Nov 2018 | Nima Shahbazi | Ph.D. | EECS | Discovery and Effective Use of Frequent Itemset Mining and Association Rules in Datasets | Chair, Examining Committee |

UNDERGRADUATE SUPERVISION (DIRECTED READING, RESEARCH ASSISTANTSHIPS/ASSOCIATES, LAB VOLUNTEERING)

| DATES | Student(s) Name | WHAT | Program | PROJECT/READING COURSE |
|------------------------|-------------------------|---------------------------------|---------|---|
| May 2021 – Aug 2021 | Nina Yanin | Research Intern (NSERC USRA) | EECS | Modeling and evaluation of location-based risk of epidemics using mobility data |
| May 2021 – Aug 2021 | Gian Alix | Research Intern (NSERC USRA) | EECS | Personalized trip recommendations for mitigating the risk of infection during epidemics |
| Jan 2021 – Apr 2021 | Ege Cakmac | CS Project (EECS 4080) | EECS | Deep learning models for gait identification and analysis |
| May 2020 – Aug 2020 | Kenneth Tjhia | Research Intern (NSERC USRA) | EECS | Learning active paths in streaming graphs |
| May 2020 – Aug 2021 | Jing Li | Research Intern (LURA, 2x) | EECS | Epidemic Dynamics on Digitally Traced Contact Networks |
| May 2020 – Aug 2020 | Jialin Sun | CS Project (EECS 4080) | EECS | Epidemic Dynamics on Digitally Traced Contact Networks |
| SEP 2019 – Apr 2020 | Aamir Ahmad | CS Project (EECS 4088) | EECS | Gait identification and analysis using machine learning through a mobile app |
| SEP 2019 – Apr 2020 | Hassaan Abid | CS Project (EECS 4088) | EECS | Gait identification and analysis using machine learning through a mobile app |
| SEP 2019 – Apr 2020 | Sami Tarazi | CS Project (EECS 4088) | EECS | Learning active paths in streaming graphs |
| SEP 2019 – Apr 2020 | Andrew Jaramillo | CS Project (EECS 4088) | EECS | Machine learning based optimization for database workloads |
| May 2019 – Aug 2019 | Kenneth Tjhia | Research Intern (NSERC USRA) | EECS | Learning interactions of moving objects using variational auto-encoders |
| May 2019 – Aug 2019 | Mahmoud Alsaeed | Research Intern (LURA) | EECS | Distributed sweep-line algorithm for scalable geometric object intersection analytics |
| Jan 2019 – Apr 2019 | Ragheb Abunahla | CS Project (EECS 4080) | EECS | Sentiment and emotion analysis of song lyrics for music recommendations systems |
| Jan 2019 – Apr 2019 | Praise Ayorinde | CS Project (EECS 4080) | EECS | Building code-based github user profiles for automatic project expert recommendations |
| May 2018 – Aug 2018 | Hao (Leslie) Li | Directed Reading (EECS 4070) | EECS | Network representation learning |
| May 2018 – Aug 2018 | Yi Yao | Volunteer | EECS | Trajectory data mining |
| May 2018 – Aug 2018 | Jay Cen | Volunteer | EECS | Trajectory data mining |
| May 2018 – Aug 2018 | Minghong (Sophia) Xu | Volunteer | EECS | Network representation learning |
| May 2017 – Aug 2018 | Andrew Jaramillo | Volunteer | EECS | Mining city neighborhood dynamics |

STUDENT AWARDS / RECOGNITIONS

| Fall 2021 | Jing Li | Vector Scholarship in AI | VECTOR INSTITUTE |
|-------------|---|---|---|
| FALL 2021 | Jing Li | Lassonde Graduate Entrance Scholarship (LGES) | YORK UNIVERSITY |
| FALL 2021 | Gian Alix | Vector Scholarship in AI | VECTOR INSTITUTE |
| SUMMER 2021 | Nina Yanin | Undergraduate Student Research Award (USRA) | NSERC |
| SUMMER 2021 | Gian Alix | Undergraduate Student Research Award (USRA) | NSERC |
| WINTER 2021 | Jing Li | Lassonde Undergraduate Research Award (LURA) | LASSONDE SCHOOL OF ENGINEERING |
| Jun 2020 | Saim Mehmood | IEEE MDM 2020 Best Paper Award | 21 st IEEE International Conference on Mobile Data Management |
| SUMMER 2020 | Kenneth Tjhia | Undergraduate Student Research Award (USRA) | NSERC |
| SUMMER 2020 | Jing Li | Lassonde Undergraduate Research Award (LURA) | LASSONDE SCHOOL OF ENGINEERING |
| SUMMER 2019 | Kenneth Tjhia | Undergraduate Student Research Award (USRA) | NSERC |
| SUMMER 2019 | Mahmoud Alsaeed | Lassonde Undergraduate Research Award (LURA) | LASSONDE SCHOOL OF ENGINEERING |
| DEC 2018 | Tilemachos Pechlivanoglou | IEEE BigData 2018 Student Travel Award | IEEE INTERNATIONAL CONFERENCE ON BIGDATA 2018 |
| Jun 2018 | Abdullah Sawas, Abdullah Abuolaim, Mahmood Afifi | IEEE MDM 2018 Best Paper Award | 19 th IEEE International Conference on Mobile Data Management |

SERVICE (COMMITTEE MEMBERSHIP, EDITORIAL ACTIVITY, LEADERSHIP)

COMMITTEE MEMBERSHIP

COMMUNITY LEVEL (GREATER TORONTO AREA)

| 2018-2019 | Ad hoc Program Advisory Committee (PAC) Member, Durham College Honors Bachelor in Artificial Intelligence |
|-----------------|---|
| 2018-2019 | Judge, American Statistical Association DataFest Challenge at University of Toronto (DataFest@UofT) |
| University levi | el (York University) |
| 2017-2020 | Organizer, Grad Course of NSERC CREATE Data Analytics and Visualization (DAV) |
| 2018-2019 | Organizer, Hackathon of NSERC CREATE Dependable Internet of Things Applications (DITA) |
| 2018 - 2019 | Organizer, Integrative Course of NSERC CREATE Dependable Internet of Things Applications (DITA) |
| FACULTY LEVEL (| LASSONDE SCHOOL OF ENGINEERING) |
| 2021-2022 | Member, The Lassonde College of Internal Peer Review |
| 2019-2020 | Judge, Lassonde Undergraduate Research Conference |
| 2018-2019 | Project Supervisor, ENG4000 (Final Year Undergraduate Project) |
| | Topic: Creating a Database Solution for the UNESCO Chair Research |

Team: Andrew Ferreira, Asma Hassan, Dan Sheng, Eric Dao, Shahriar Ahmed Dhrubo

DEPARTMENT LEVEL (ELECTRICAL ENGINEERING AND COMPUTER SCIENCE)

| 2020 - 2021 | Member, Graduate Executive Committee |
|-------------|---|
| 2020 - 2021 | Coordinator, Department Seminars (Computer Science) |
| 2020 - 2021 | Member, Industry Partnership Program Committee |
| 2020 - 2021 | Member, Faculty Hiring Search Committee (Computer Science – ML/AI) |
| 2020 - 2021 | Member, Graduate Admissions Committee |
| 2019 - 2020 | Coordinator, Department Seminars (Computer Science) |
| 2019 - 2020 | Member, Faculty Hiring Search Committee (Computer Science – AI/ML/Vision) |
| 2019 - 2020 | Member, Tenure & Promotion Adjudication Committee |
| 2019 - 2020 | Member, Industry Partnership Program Committee |
| 2018 - 2019 | Member, Faculty Hiring Search Committee (Computer Security) |
| 2018 - 2019 | Member, Industry Partnership Program Committee |
| 2018 - 2019 | Member, Graduate Admissions Committee |
| 2017 - 2018 | Member, Markham Campus Planning Committee |
| 2017 - 2018 | Member, Industry Partnership Program Committee |
| 2017 - 2018 | Member, Tenure & Promotion File Preparation Committee (FPC) |
| 2017 - 2018 | Member, Graduate Admissions Committee |

REVIEWER FOR RESEARCH FUNDING AGENCIES

| 2020 | FONDECYT, Chile (The National Fund for Scientific and Technological Development) |
|-------------|--|
| 2019 - 2020 | National Science and Engineering Research Council Discovery Grants (NSERC DG) |
| 2018 - 2020 | Mitacs Accelerate Entrepreneur (MITACS ACCELERATE) |
| 2017 | The Canada-Israel Industrial Research and Development Foundation (CIIRDF) |

ACADEMIC JOURNAL EDITORIAL ACTIVITIES (REVIEWER / EXTERNAL REVIEWER)

| 2019/8 – Present | Associate Editor, Computational Intelligence (COIN) |
|-------------------|---|
| 2021/01 – PRESENT | Reviewer, ACM Transactions on Spatial Algorithms and Systems (TSAS) |

| 2021/01 - PRESENT | Reviewer, IEEE Transactions on Network Science and Engineering (TNSE) |
|-------------------|--|
| 2020/06 – Present | Reviewer, IEEE Transactions on Computing (TC) |
| 2020/01- PRESENT | Reviewer, IEEE Transactions on Intelligent Systems Technology (TIST) |
| 2016/5 - 2019/8 | Reviewer, IEEE Transactions on Knowledge and Data Engineering (TKDE) |
| 2017/4-2019/6 | Reviewer, ACM Transactions on the Web (TWEB) |
| 2015/10 - 2019/5 | Reviewer, ACM Transactions on Knowledge Discovery from Data (TKDD) |
| 2019/8-2019/11 | Reviewer, Journal of Combinatorial Optimization (JOCO) |
| 2018/4 - 2018/6 | Reviewer, IEEE Internet of Things (IoT) |
| 2018/8-2018/9 | Reviewer, IEEE Networking Letters (NL) |
| 2014/6-2017/9 | Reviewer, The Proceedings of the VLDB Endowment (PVLDB) |
| 2017/5 - 2017/6 | Reviewer, Springer Machine Learning (MACH) |
| 2017/4 - 2017/5 | Reviewer, Computer and Informatics (CAI) |
| 2012/9-2020/01 | Reviewer, Social Network Analysis and Mining (SNAM) |
| 2016/7 - 2016/9 | Reviewer, Internet Mathematics (IM) |
| 2016/1 - 2016/3 | Reviewer, Applied Network Science (ANS) |
| 2015/2 - 2015/11 | Reviewer, Knowledge and Information Systems (KAIS) |
| 2014/12 - 2015/1 | Reviewer, ACM Transactions on Internet Technology (TOIT) |
| 2014/9 - 2014/10 | Reviewer, IEEE Journal of Selected Topics in Signal Processing (J-STSP) |
| 2014/1 - 2014/3 | Reviewer, ACM Transactions on Database Systems (TODS) |
| 2013/5 - 2013/6 | Reviewer, Frontiers of Computer Science (FCS) |
| 2012/12 - 2013/2 | Reviewer, Information Sciences (IS) |
| 2012/7 - 2012/9 | Reviewer, IEEE Transactions on Information Forensics and Security (TIFS) |
| 2007/5 - 2011/4 | Reviewer, International Journal on Artificial Intelligence Tools (IJAIT) |
| 2006/6 - 2006/7 | Reviewer, Information Systems (IS) |
| | |

CONFERENCE PROGRAM COMMITTEE MEMBER / REVIEWER

| 2021 | Program Committee Member, 27th ACM International Conf. on Knowledge Discovery & Data Mining (ACM KDD 2021) |
|------|---|
| 2021 | Program Committee Member, 44th Intern. Conf. on Research and Development in Information Retrieval (ACM SIGIR 2021) |
| 2021 | Program Committee Member, 14th ACM International Conference on Web Search and Data Mining (ACM WSDM 2021) |
| 2021 | Program Committee Member, 30th ACM International Conf. on Information and Knowledge Management (ACM CIKM 2021) |
| 2021 | Program Committee Member, 22 nd IEEE International Conference on Mobile Data Management (IEEE MDM 2021) |
| 2020 | Program Committee Member, 29th ACM International Conf. on Information and Knowledge Management (ACM CIKM 2020) |
| 2020 | Program Committee Member, 43rd Intern. Conf. on Research and Development in Information Retrieval (ACM SIGIR 2020) |
| 2020 | Program Committee Member, 1 st Asia-Pacific chapter of the Association for Computational Linguistics and the 9th International Joint Conference on Natural Language Processing (AACL-IJCNLP 2020) |
| 2020 | Program Committee Member, 30th International Conference on Computer Science and Software Engineering (CASCON 2020) |
| 2019 | Program Committee Member, 29th International Conference on Computer Science and Software Engineering (CASCON 2019) |
| 2018 | Program Committee Member, 25th ACM Conference on Information and Knowledge Management (ACM CIKM 2018) |
| 2018 | Reviewer, 44th International Workshop on Graph-Theoretic Concepts in Computer Science (WG 2018) |
| 2018 | Program Committee Member, 23rd IEEE Symposium on Computers and Communications (IEEE ISCC 2018) |
| 2017 | Program Committee Member, 26th ACM Conference on Information and Knowledge Management (ACM CIKM 2017) |
| 2017 | Reviewer, 16th International Symposium on Experimental Algorithms (SEA 2017) |
| 2017 | Program Committee Member, 22 nd IEEE Symposium on Computers and Communications (IEEE ISCC 2017) |
| 2015 | Reviewer, 31 st IEEE International Conference on Data Engineering (IEEE ICDE 2015) |
| 2015 | Reviewer, 18th International Conference on Extending Database Technology (EDBT 2015) |
| 2014 | Reviewer, 17th International Conference on Extending Database Technology (EDBT 2014) |
| 2014 | Reviewer, 20th ACM International Conference on Knowledge Discovery and Data Mining (ACM KDD 2014) |
| 2013 | Reviewer, 19th ACM International Conference on Knowledge Discovery and Data Mining (ACM KDD 2013) |
| 2012 | Reviewer, 23rd ACM Conference on Hypertext and Social Media (ACM HyperText 2012) |
| | |

- 2010 Reviewer, 19th International World Wide Web Conference (WWW 2010)
- 2010 Reviewer, 19th ACM Conference on Information and Knowledge Management (ACM CIKM 2010)
- 2010 Reviewer, 21st ACM Conference on Hypertext and Social Media (ACM HyperText 2010)
- 2008 Reviewer, 14th ACM International Conference on Knowledge Discovery and Data Mining (ACM KDD 2008)
- 2007 Reviewer, 13th ACM International Conference on Knowledge Discovery and Data Mining (ACM KDD 2007)
- 2005 Reviewer, 4th International Semantic Web Conference (ISWC 2005)
- 2004 Reviewer, 3rd International Semantic Web Conference (ISWC 2004)

WORKSHOP PROGRAM COMMITTEE MEMBER / REVIEWER

- 2011 Program Committee Member, 3rd International Workshop on Search and Mining User-generated Content (ACM SMUC 2011)
- 2010 Program Committee Member, 2nd International Workshop on Search and Mining User-generated Content (ACM SMUC 2010)
- 2009 Program Committee Member, 1st International Workshop on Monitoring Social Media (MSM 2009)

LEADERSHIP

| 2019 - 2021 | Local Organizing Committee, IEEE MDM 2021 |
|-------------|--|
| | As a member of a local organizing committee, I coordinated the successful efforts to host the 22 nd IEEE International Conference on Mobile Data Management (IEEE MDM 2021) in Toronto, Canada. In particular, I brought a team together, coordinated organizing efforts, prepared the bidding slide deck and delivered the bidding presentation to the conference steering committee. The IEEE MDM series of conferences, since its debut in 1999, has established itself as a prestigious forum for the exchange of innovative and significant research results in mobile data management. The conference provides unique opportunities to bring researchers, engineers, and practitioners together to explore new ideas, techniques, and tools, and exchange experiences. Comprising both research and industry tracks, it serves as an important bridge between academic researchers and industry researchers. Along with the presentations of research publications, it also serves as a meeting place for technical demonstrations, workshops, advanced seminars, panel discussions as well as PhD forum and Industrial forum to cater PhD students and industrial developers. The conference focuses on research contributions in data management in mobile, ubiquitous and pervasive computing. |
| 2017 - 2019 | New Graduate Program, Proposal Lead, Professional Master of Data Science Program |
| | The Lassonde School of Engineering (in collaboration with other Faculties at York University) has prepared a proposal for a new Professional Master of Data Science program. The program is designed to meet a rapidly growing demand for professionals who can work effectively with data at scale – data scientists – and to train leaders in data science that can assume key positions in business, government, or non-profit organizations. When I joined York University, I was tasked by the Chair of the Department (Prof. Richard Wildes) to prepare a proposal for a new Professional Master of Data Science program. The proposal was reviewed and proof-read by the Chair of the department. The program is still at works, with efforts now coordinated at the Faculty level. |
| 2017-2019 | New Undergraduate Program, Member of Working Group, Industrial BSc Program |
| | The EECS department has developed an industry partnership option for the Honours B.A. and Honours B.Sc. programs in computer science. Part of the education for students in this option is delivered through experiential learning at an industry partner's site. An industry partnership option allows students to receive a complete academic education, while at the same time gain valuable work experience that will enhance their knowledge on technical issues and improve their post-graduation employability. |
| 2017 - 2018 | New Markham Center Campus (MCC), Member of Working Group, EECS @ Markham |
| | York University is in the process of establishing a new campus in Markham named Markham Center Campus (MCC), with a planned opening date of fall 2023 (originally planned for Fall 2021). With a planned initial target size of 4,000 students and a long-term planned size of 20,000, Information Technology is touted as one of the key program concentrations at this new campus. Planning for Markham has been underway for some time, and Lassonde is part of the planning process. The EECS department established a working group to respond to this opportunity. The goal of this document is to provide a short 'white paper' to put forth both the constraints and opportunities present at Markham, and to help frame the EECS response to this opportunity. |