

# MANOS PAPAGELIS

YORK UNIVERSITY, LASSONDE SCHOOL OF ENGINEERING  
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## RESEARCH INTERESTS

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

## EDUCATION

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- 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

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- 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)

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- NOV 2023      31<sup>ST</sup> ACM INTERN. CONF. ON ADVANCES IN GEOGRAPHIC INFORMATION SYSTEMS (ACM SIGSPATIAL 2023) – **Best Paper Runner Up Award**
- JUL 2021      LASSONDE SCHOOL OF ENGINEERING – **Lassonde Educator of the Year Award**
- JUN 2020      21<sup>ST</sup> IEEE INTERN. CONF. ON MOBILE DATA MANAGEMENT (IEEE MDM 2020) – **Best Paper Award**
- JUN 2018      19<sup>TH</sup> IEEE INTERN. CONF. ON MOBILE DATA MANAGEMENT (IEEE MDM 2018) – **Best Paper Award**
- JAN 2018      26<sup>TH</sup> ACM INTERN. CONF. ON INFORM. & KNOWL. MANAGEMENT (ACM CIKM 2017) – **Outstanding Reviewer Award**
- AUG 2015 – JUL 2016      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  
MAY 2009 – JUL 2009 YAHOO! RESEARCH – Research Internship Fellowship  
SEP 2004 – 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

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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

OCT 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

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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 – 2022	Member/Co-PI	BRAIN Alliance (Big Data Research, Analytics, Information Networks)

2017 – 2022	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)
2022 – PRESENT	Member	Centre for Artificial Intelligence and Society (CAIS)
2023 – PRESENT	Member	Connected Minds CFREF Program (CM)
2022 – PRESENT	Faculty Affiliate	The City Institute at York University (CITY)
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 NOV 2023)

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Number of citations (by Google scholar):	<b>1875+</b>
H-index (by Google scholar):	<b>17</b>
Number of Publications:	<b>59</b>
- <i>Journal articles (peer-reviewed)</i> :	<i>11</i>
- <i>Conferences papers (peer-reviewed)</i> :	<i>33</i>
- <i>Workshop papers (peer-reviewed)</i> :	<i>8</i>
- <i>Magazine articles (peer-reviewed)</i> :	<i>1</i>
- <i>Theses</i> :	<i>3</i>
- <i>Patents (granted)</i> :	<i>3</i>
Number of submitted/under review:	<b>7</b>
- <i>Journal articles (peer-reviewed)</i> :	<i>1</i>
- <i>Conferences papers (peer-reviewed)</i> :	<i>4</i>
- <i>Patents (applications)</i> :	<i>2</i>
Invited talks / Keynote talks	<b>10</b>
Software releases	<b>9</b>
Technical reports (non-referred)	<b>3</b>
Citation analysis (by Google scholar):	<a href="http://goo.gl/3bi9m">http://goo.gl/3bi9m</a>

## INVITED LECTURES / KEYNOTE TALKS

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DATE	TALK TITLE
DEC 13TH, 2023	Trajectory Data Mining in the Age of Big Data and AI (Ontario Database Day 2023)
OCT 23RD, 2023	Trajectory Data Mining in the Age of Big Data and AI (Missouri University of Science & Technology (MS&T))
NOV 25TH, 2021	Mobility-based Models of Epidemic Spreading, Laboratory of Mathematical Parallel Systems (LAMPS, YorkU)
DEC 13TH, 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)
MAY 28TH, 2019	Fast and Accurate Mining of Evolving & Trajectory Networks. Keynote at the International Workshop on Dynamics On and Of Complex Networks 2019 (DOOCN-XII)
MAY 9TH, 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)

## JOURNAL ARTICLES (PEER-REVIEWED)

- [J12] Ghazaleh Babanejaddehaki, G., An, A., & Papagelis, M. (2023). A Survey on Disease Outbreak Detection Methods Utilizing Diverse Data Sources. *ACM Transactions on Computing for Healthcare (ACM HEALTH)*. **Major revisions requested.**
- [J11] \*Babanejad, N., Davoudi, H., Agrawal, A., An, A., & Papagelis, M. (2023). The Role of Preprocessing for Word Representation Learning in Affective Tasks. *IEEE Transactions on Affective Computing (IEEE TAFEC)*. 1 – 18. (**impact factor: 11.2**).
- [J10] \*Pechlivanoglou, T. \*Li, J., \*Sun, J., \*Heidari, F. & Papagelis, M. (2022). Epidemic spreading in trajectory networks. *Big Data Research journal (BDR)*. 27 (100275): 1-15. (**impact factor: 3.739**).
- [J9] \*Zhao, X., Papagelis, M., An, A., \*Chen, B. X., Liu, J., & Hu, Y. (2021). ZIPLINE: An Optimized Algorithm for the Elastic Bulk Synchronous Parallel Model. *Machine Learning (MACH)*, 110 (10), 2867 – 2903. (**impact factor: 5.414**).
- [J8] \*Costa, E. N., \*Pechlivanoglou, T. & Papagelis, M. (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. & Papagelis, M. (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. & Papagelis, M. (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., & Papagelis, M. (2017). BIM-based collaborative design and socio-technical analytics of green buildings. *Automation in Construction (AiC)*, 82, 59-74. (**impact factor: 4.032**).
- [J4] Papagelis, M. (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] Papagelis, M., 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., & Papagelis, M. (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] Papagelis, M., & 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)

- [C37] \*Quader, S., \*Jaramillo, \*N., Mukhopadhyay, S., Kalmuk, D., Zuzarte, C., Abuoda, G., Litoiu, M., & Papagelis, M. (2023). LearnedWMP: Working memory prediction of database workloads using distribution of query templates. **Submitted.**
- [C36] \*Alix, G., & Papagelis, M. (2023). St2Box: Trajectory similarity learning using set to box representations. **Submitted.**
- [C35] Tarawneh, E., Agrawal, A., An, A., Jenkin, M. & Papagelis, M. (2023). Predicting evoked emotions in conversations. **Submitted.**
- [C34] \*Nadiri, A., \*Faraji, A., \*Li, J., & Papagelis, M. (2023). TrajLearn: Leveraging generative models for trajectory prediction learning. **Submitted.**

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

- [C33] \*Faraji, A., \*Li, J., \*Alix, G., \*Alsaeed, M., \*Yanin, N., \*Nadiri, A., & Papagelis, M. (2023). Point2Hex: Higher-order mobility flow data and resources. In Proceedings of the 31st ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems. In Press (**ACM SIGSPATIAL 2023**).
- [C32] \*Alix, G., & Papagelis, M. (2023). PathletRL: Trajectory pathlet dictionary construction using reinforcement learning. In Proceedings of the 31st ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems. In Press (**ACM SIGSPATIAL 2023**). (**best paper runner up award**).
- [C31] \*Alsaeed, M., Ameeta, A., & Papagelis, M. (2023). Trajectory-user linking using higher-order mobility flow representations. In Proceedings of the 24th IEEE International Conference on Mobile Data Management, pp. 158-167 (**IEEE MDM 2023**).
- [C30] \*Arasteh, F., SheikhGarGar, S., & Papagelis, M. (2022) Network-aware multi-agent reinforcement learning for the vehicle navigation problem. In Proceedings of the 30th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems. In Press (**ACM SIGSPATIAL 2022**).
- [C29] \*Nematchari, A., \*Pechlivanoglou, T., & Papagelis, M. (2022) Evaluating and forecasting the operational performance of road intersections. In Proceedings of the 30th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems. In Press (**ACM SIGSPATIAL 2022**).
- [C28] \*Alix, G., \*Yanin, N., \*Pechlivanoglou, T., \*Li, J., \*Heidari, F., & Papagelis, M. (2022). A Mobility-based recommendation system for mitigating the risk of infection during epidemics. In Proceedings of the 23rd IEEE International Conference on Mobile Data Management, pp. 292-295 (**IEEE MDM 2022**).
- [C27] \*Zhao, X., Papagelis, M., An, A., \*Chen, B. X., Liu, J., & Hu, Y. (2021). (Extended Abstract) ZIPLINE: An optimized algorithm for the elastic bulk synchronous parallel model. In Proceedings of the 8th IEEE International Conference on Data Science and Advanced Analytics, pp. 1-2 (**IEEE DSAA 2021**).
- [C26] \*Babanejad, N., \*Agrawal, A., Davoudi, H., An, A., & Papagelis, M. (2020). Affective and contextual embedding for sarcasm detection. In Proceedings of the 28th International Conf. on Computational Linguistics, pp. 225–243 (**COLING 2020**).
- [C25] \*Pechlivanoglou, T., \*Alsaeed, M. & Papagelis, M. (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. & Papagelis, M. (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., & Papagelis, M. (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. & Papagelis, M. (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., & Papagelis, M. (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., Papagelis, M., 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. & Papagelis, M. (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. & Papagelis, M. (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., & Papagelis, M. (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. & Papagelis, M. (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**). ([best paper award](#)).
- [C15] \*Sawas, A., \*Abuolaim, A., \*Afifi, & M., Papagelis, M. (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., & Papagelis, M. (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] Papagelis, M., 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] Papagelis, M. (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., & Papagelis, M. (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] Papagelis, M., 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] Papagelis, M., 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] 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**).
- [C7] Papagelis, A., Papagelis, M., & 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., Papagelis, M., & 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] Papagelis, M., 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] Papagelis, M., 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] Papagelis, M., 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] Papagelis, M., & 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] Papagelis, M., & 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)

- [W8] \*Yanin, N., & Papagelis, M. (2023). Optimal risk-aware POI recommendations during epidemics. In Proceedings of the 4<sup>th</sup> ACM SIGSPATIAL International Workshop on Spatial Computing for Epidemiology (**ACM SIGSPATIAL/SpatialEpi 2023**).
- [W7] Altarawneh, E., Agrawal, A., Jenkin, M., & Papagelis, M. (2023). Conversation Derailment Forecasting with Graph Convolutional Networks. In Proceedings of the 61st ACL International Workshop on Online Abuse and Harms (**ACL/WOAH 2023**).
- [W6] \*Pechlivanoglou, T. \*Alix, G., \*Yanin, N., \*Li, J., \*Heidari, F. & Papagelis, M. (2022). Microscopic modeling of spatiotemporal epidemic dynamics. In Proceedings of the 3<sup>rd</sup> ACM SIGSPATIAL International Workshop on Spatial Computing for Epidemiology (**ACM SIGSPATIAL/SpatialEpi 2022**).
- [W5] \*Babanejad, N., \*Agrawal, A., Davoudi, H., An, A., & Papagelis, M. (2019). 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., Papagelis, M., & 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., Papagelis, M., & 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., & Papagelis, M. (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] Papagelis, M., & 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] Papagelis, M., & Plexousakis, D. (2006). CONFIOUS: Conference Management System with Intelligence, Power and Style. ERCIM NEWS Magazine, Vol. 64, Jan 2006.

## TECHNICAL REPORTS (NON-REFEREED)

- [TR3] Papagelis, M., 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., & Papagelis, M. (2004). Description of application based on the Alexandria digital gazetteer protocol. Available online at the Alexandria Digital Library (2004).
- [TR1] Papagelis, M., & Plexousakis, D. (2003). Recommendation based discovery of dynamic virtual communities. Movie Recommendation System (MRS) Overview.

## THESES

- [T3] Papagelis, M. (2015). Understanding and improving online social interactions and processes: methods, algorithms & applications. Ph.D. thesis, Department of Computer Science, University of Toronto, Canada.
- [T2] Papagelis, M. (2005). Crawling the algorithmic foundations of recommendation technologies. M.Sc. thesis, Department of Computer Science, University of Crete, Greece.
- [T1] Papagelis, M. (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

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### PATENTS (APPLICATIONS)

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

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

### PATENTS (GRANTED)

[P5] \*Quader, S., \*Jaramillo, A., Mukhopadhyay, S., Papagelis, M., Litoiu, M., Kalmuk, D., Mierzejewski, P. (2022). Learning-based Workload resource optimization for autonomous database management systems. US Patent No. 11500830.

[P1] Murdock, V., van Zowl, R., Papagelis, M. (2016). Media or content tagging determined by user credibility signals”. US Patent No. 9,529,822.

[P3] El-Diraby, T., Papagelis, M., Krijnen, T. (2022). Systems and methods for sustainability and social interaction analysis in building information modeling. US Patent No.: 11,270,036.

### RESEARCH FUNDING HISTORY

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FUNDING PERIOD	ROLE	FUNDING AGENCY & RESEARCH PROPOSAL TITLE	FUNDING	STATUS
2024 – 2029	<b>Principal Investigator</b>	Ontario, Early Researcher Award, “Machine Learning Models for Spatiotemporal Data and Networks”	<b>\$140,000 over 5 years</b>	<b>Applied</b>
2024 – 2025	<b>Principal Investigator</b>	NSERC RTI, “Computing Infrastructure for Machine Learning and Data-intensive Workloads”	<b>\$150,000</b>	<b>Applied</b>
2024 – 2028	Co-Investigator	SSHRC (CBRF/BRIF), “Technologies for Economically Sustainable mass-Testing (TEST)” (PI: Dr. Sergey N. Krylov)	\$19,964,000 over 4 years	Applied
2022 – 2027	<b>Principal Investigator</b>	NSERC DISCOVERY, “Deep Learning Models for Mobility Data Mining”	<b>\$145,000 over 5 years</b>	<b>Granted</b>
2023 – 2028	Co-Investigator (with 9 more)	Ontario Research Fund – Research Excellence (ORF-RE), “Making Ontario Buildings Smart: Driving adoption through scalable technology advances and novel business strategies” (PI: Dr. Jennifer McArthur)	<b>\$1,993,600 over 5 years</b>	<b>Applied</b>
2023 - 2028	Collaborator	Canada Foundation for Innovation (CFI), “Advancing Canadian Expertise for Next-Generation Spectroscopic Sky Survey Facilities” (PI: Dr. Patrick Hall)	\$6,500,000 Over 5 years	Applied
2021 – 2021	<b>Principal Investigator</b>	York AI Industry Partnership Fund, “Point-of-Sale (POS) Predictive Analytics for Retailer Business Optimization”	<b>\$12,000 over 4 months</b>	<b>Granted</b>
2021 – 2023	Co-Investigator (with 70 more)	NSERC Emerging Infectious Diseases Modelling Initiative, “One Health Modelling Network for Emerging Infections (OMNI)” (PI: Dr. Huaiping Zhu)	\$2,500,000 over 2 years	Granted
2019 – 2024	Co-Investigator (with 1 more)	NSERC CRD, “Machine Learning based Optimization for Database Workloads” (PI: Dr. Marin Litoiu)	\$510,000 over 5 years	Granted
2018 – 2024	Co-Investigator (with 9 more)	NSERC CREATE, “Dependable Internet of Things Applications” (DITA) (PI: Dr. Marin Litoiu)	\$1,650,000 over 6 years	Granted

2018 – 2021	Co-Investigator (with 9 more)	NSERC CREATE, “Data Analytics and Visualization” (DAV) – The program is active since 2016; I was invited to join the program in 2018 (PI: Dr. James Elder).	\$1,650,000 over 6 years	Granted
2018 – 2020	Co-Investigator (with 2 more)	SOSCI, “Distributed Deep Learning and Graph Analytics Using IBM Spectrum Computing Solutions”	(inkind)	Granted
2018 – 2019	Co-Investigator (with 1 more)	Big Data Research and Analytics Information Network (BRAIN), “Graph-based Anomaly Detection”	\$21,000	Granted
2019 – 2020	Co-Investigator (with 2 more)	York University Lassonde Innovation Fund (LIF), “AI-based prediction of permeable pavement surface infiltration rates”	\$23,690	Granted
2019 – 2020	<b>Principal Investigator</b>	NSERC ENGAGE PLUS, “Evaluating the Operational Performance of Road Intersections by Mining Trajectory Data Streams”	<b>\$14,286 over 6 months</b>	<b>Granted</b>
2018 – 2019	<b>Principal Investigator</b>	NSERC ENGAGE, “Evaluating the Operational Performance of Road Intersections by Mining Trajectory Data Streams”	<b>\$25,000 over 6 months</b>	<b>Granted</b>
2018 – 2018	<b>Principal Investigator</b>	NSERC ENGAGE, “Ranking Experts in Location-aware Question-Answering Services”	<b>\$25,000 over 6 months</b>	<b>Granted</b>
2017 – 2022	<b>Principal Investigator</b>	NSERC DISCOVERY, “Mining and Exploration of the Social Graph: Theory and Applications”	<b>\$100,000 over 5 years</b>	<b>Granted</b>
2017 – 2019	Co-Investigator (with 1 more)	NSERC CRD, “Distributed Deep Learning and Graph Analytics Using IBM Spectrum Computing Solutions”	\$70,000 over 2 years	Granted
2017 – 2018	Co-Investigator (with 1 more)	NSERC RTI, “Computing and Storage Infrastructure for Big Data Analytics”	\$96,554	Granted
2017 – 2018	Co-Investigator (with 1 more)	Big Data Research and Analytics Information Network (BRAIN), “Streaming Graph Anomaly Detection”	\$21,000	Granted
2017 – 2020	<b>Principal Investigator</b>	York University Start-up Grant	<b>\$150,000 over 4 years</b>	<b>Granted</b>

## SOFTWARE RELEASES

DATE	NAME	BRIEF DESCRIPTION	URL
2023	PATHLETRL	A deep learning model based on reinforcement learning to construct compact trajectory pathlet dictionaries.	<a href="https://github.com/techGIAN/PathletRL">https://github.com/techGIAN/PathletRL</a>
2023	POINT2HEX	A tool for converting trajectory datasets to higher-order trajectory datasets where each trajectory is represented as a sequence of hexagons on a hex-tessellated map. We provide the code and a repository of popular datasets.	<a href="https://github.com/alifa98/point2hex">https://github.com/alifa98/point2hex</a>
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.	<a href="https://github.com/tipech/mrsweep">https://github.com/tipech/mrsweep</a>
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.).	<a href="https://github.com/tipech/overlapGraph">https://github.com/tipech/overlapGraph</a>

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.	<a href="https://github.com/NastaranBa/ACE-for-Sarcasm-Detection">https://github.com/NastaranBa/ACE-for-Sarcasm-Detection</a>
2019	ZIPLINE	An optimization method for materializing ElasticBSP. ElasticBSP is an efficient method for training deep learning models in a distributed environment.	<a href="https://github.com/xingzhao/ElasticBSP">https://github.com/xingzhao/ElasticBSP</a> (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.).	<a href="https://github.com/tipech/overlapGraph">https://github.com/tipech/overlapGraph</a>
2019	EVONRL	A deep learning method for obtaining continuous low-rank representations of an evolving graph/network.	<a href="https://github.com/farzana0/EvoNRL">https://github.com/farzana0/EvoNRL</a>
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.	<a href="https://github.com/tipech/trajectory-networks">https://github.com/tipech/trajectory-networks</a>

# TEACHING (LECTURING, SUPERVISION, COMMITTEE MEMBERSHIP)

## UNDERGRADUATE TEACHING

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### UNDERGRADUATE COURSES DEVELOPED

TERM/YEAR	COURSE CODE	COURSE NAME & DESCRIPTION
FALL 2016	EECS 4414	<b>INFORMATION NETWORKS</b> 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	<b>BIG DATA SYSTEMS</b> 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, F21, W22, F23, W24, SU23
EECS 2031	Software Tools	W18

## GRADUATE TEACHING

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### GRADUATE COURSES DEVELOPED

TERM / YEAR	COURSE CODE	COURSE NAME & DESCRIPTION
WINTER 2017	EECS 6414	<b>DATA ANALYTICS &amp; VISUALIZATION</b> 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 (currently listed as EECS 4414/5414)	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.
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#### GRADUATE COURSES TAUGHT

COURSE CODE	COURSE NAME	TERM/YEAR
EECS 6414	Data Analytics and Visualization	F17, W19, W20, W21, W24
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	100.0%
York University	EECS4414	Undergraduate (4 <sup>th</sup> )	W22	29	96.1%
York University	EECS4415	Undergraduate (4 <sup>th</sup> )	S21	60	92.3%
York University	EECS4414	Undergraduate (4 <sup>th</sup> )	F21	45	92.9%
York University	EECS4414	Undergraduate (4 <sup>th</sup> )	F20	48	93.9%
York University	EECS3421	Undergraduate (3 <sup>rd</sup> )	SU20	114	93.4%
York University	EECS4415	Undergraduate (4 <sup>th</sup> )	F19	44	94.4%
York University	EECS4415	Undergraduate (4 <sup>th</sup> )	F18	38	95.0%
York University	EECS4414	Undergraduate (4 <sup>th</sup> )	W18	8	100.0%
York University	EECS3421	Undergraduate (3 <sup>rd</sup> )	F19	98	90.2%
York University	EECS3421	Undergraduate (3 <sup>rd</sup> )	W19	92	93.0%

SUPERVISION SUMMARY (JUL 2016 – PRESENT)

PROGRAM & DEGREE	#CURRENT	#GRADUATED	#TOTAL
EECS Postdoctoral Fellow (PDF)	1	1	2
EECS PhD	2	1	3
EECS MSc	3	11	14
EECS MASc	0	1	1
EECS MScAI	1	0	1
EECS Grad Research Project/Collaboration <sup>3</sup>	0	11	11
EECS Undergrad	2	20	22
<b>#Total</b>	<b>9</b>	<b>45</b>	<b>54</b>

POSTGRADUATE SUPERVISION

POSTGRADUATE FELLOWS SUPERVISED

DATES	STUDENT NAME	DEGREE	PROGRAM	THESIS TOPIC
APR 2023 – PRESENT	Ghadeer Abuoda	PDF	EECS	Machine Learning Models for Database Workload Memory Prediction
SEP 2019 – AUG 2021	Sumona Mukhopadhyay (Currently Faculty Member at California Polytechnic State University)	PDF	EECS	Database Workload Query Forecasting and Optimization

GRADUATE SUPERVISION

GRADUATE STUDENTS SUPERVISED

DATES	STUDENT NAME	DEGREE	PROGRAM	THESIS TOPIC
JAN 2024 - PRESENT	Jing Li	Ph.D.	EECS	Machine learning for spatiotemporal graphs (TBD)
SEP 2019 - PRESENT	Tilemachos Pechlivanoglou (On leave)	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

<sup>2</sup> This range is reflecting scores in course-level questions; instructor scores were not collected that year due to union strike disruptions.

<sup>3</sup> 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 2023 – PRESENT	Nina Yanin	M.Sc.	EECS	Deep learning models for spatiotemporal data (TBD)
JAN 2023 – PRESENT	Khoa Tran	M.Sc.AI	EECS	Deep learning models for text classification (TBD)
SEP 2022 – PRESENT	Ali Faraji	M.Sc.	EECS	Deep learning models for spatiotemporal data (TBD)
SEP 2022 – PRESENT	Amirhossein Nadiri	M.Sc.	EECS	Machine learning with graphs (TBD)
SEP 2021 – DEC 2023	Jing Li	M.Sc.	EECS	Trajectory prediction learning using deep generative models
SEP 2021 – AUG 2023	Gian Alix	M.Sc.	EECS	Leveraging deep learning methods for trajectory similarity learning and trajectory pathlet dictionary construction
SEP 2020 – APR 2023	Mahmoud Alsaeed	M.Sc.	EECS	Trajectory-User linking using higher-order mobility flow representations
SEP 2020 – MAY 2023	Andrew Nicolas Jaramillo (Co-supervised)	M.Sc.	EECS	Batch query memory prediction using deep query template representations
SEP 2019 – FEB 2022	Mahta Shafieesabet	M.Sc.	EECS	Mining and exploration of active components in a network of time series
SEP 2019 – OCT 2021	Fazel Arasteh	M.A.Sc.	EECS	Reinforcement learning for adaptive navigation of autonomous vehicles in the road network
SEP 2019 – APR 2022	Ali NematiChari	M.Sc.	EECS	Evaluating and forecasting the operational performance of road 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
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
FEB 2023 – DEC 2023	Arghya Kundu	M.Sc.	EECS	An Explainable Knowledge Graph Based Machine Learning Model for Fact Checking	Supervisory Committee
OCT 2022 – PRESENT	Deeksha Chandola	M.Sc.	EECS	Using Personalization to aid in Sentiment Analysis in Conversations	Supervisory Committee
OCT 2022 – APR 2023	Haider Shoaib	M.Sc.	EECS	Speed Optimization to Maximize Vehicle Traffic Flow with Handoff-Aware Wireless Data Rate Constraints	Supervisory Committee
JUN 2022 – PRESENT	Ghazaleh Mohseni Hosseinabadi	Ph.D.	CIVIL	Multi-modal Transportation (TBD)	Supervisory Committee
NOV 2021 – DEC 2023	Hongda Wu	Ph.D.	EECS	Federated Learning for Heterogeneous Networks: Algorithmic and System Design	Supervisory Committee
OCT 2021 – PRESENT	Farnaz Niknia	Ph.D.	EECS	TBD	Supervisory Committee
JUN 2021 – OCT 2022	Shankar Kantharaj	M.Sc.	EECS	Open Ended Question Answering with Charts	Supervisory Committee
JUN 2021 – AUG 2022	Elias Bestard Lorigados	M.Sc.	EECS	Fan-Fiction and AO3 Free-Form Tagging Practice: Innovating Open-Source Tools for Tag Network Visualization and Analysis	Supervisory Committee
JUN 2021 – APR 2022	Jaime Jales Dantas	M.Sc.	EECS	On Performance Tuning of Serverless IoT Applications	Supervisory Committee
MAY 2021 – PRESENT	Afnan Ahmed	Ph.D.	ESSE	TBD	Supervisory Committee
MAR 2021 – PRESENT	Amirhossein Nourbakhshrezaei	Ph.D.	ESSE	Spatial quantum computation in graph optimization problems in Transportation Applications	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 – SEP 2021	Parsa Farshadfar	M.A.Sc.	EECS	An Energy-efficient Spiking CNN Implementation for Cross-patient Epileptic Seizure Detection	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 – JUN 2022	Yifan Li	Ph.D.	EECS	Bridging data management with Machine Learning: case studies on index, query optimization, and data acquisition	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
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 – JAN 2021	Shima Khoshrafta	Ph.D.	EECS	Learning Effective Embeddings for Dynamic Graphs and Quantifying Graph Embedding Interpretability	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
DEC 2023	Elanakayon Annalingam	M.Sc.	CIVIL	Optimizing Truck Parking Facilities with Major Distribution Centres in Pandemic Conditions	Internal, Examining Committee
DEC 2023	Amin Omidvar	Ph.D.	EECS	Empowering News Media by Improving the Quality of News Headlines using Machine Learning	<b>Chair,</b> Examining Committee

NOV 2023	Evangelos Bousias-Alexakis	Ph.D.	CIVIL	Image-based Spatial Change Detection using Deep Learning	Internal, Examining Committee
AUG 2023	Fasil Cheema	M.Sc.	EECS	Precision-Recall Cover: A Method for Assessing Generative Models	<b>Chair,</b> Examining Committee
JUL 2023	Mahsa Hadian (Polytechnique Montreal)	Ph.D.	CE	Power Estimation Framework to Ensure the Reliability of Edge Devices in Internet-of-Things Applications	<b>External,</b> Examining Committee
DEC 2022	Khadijeh (Shirin) Saednia	Ph.D.	EECS	Machine Learning and Digital Histopathology Analysis for Tissue Characterization and Treatment Response Prediction in Breast Cancer	<b>Chair,</b> Examining Committee
DEC 2022	Mahya Jodeiri Rad	M.Sc.	ESSE	Active Reinforcement Learning for the Semantic Segmentation of Images Captured by Mobile Sensors	Internal, Examining Committee
DEC 2022	Alireza Naeiji	M.Sc.	EECS	Question Generation using Sequence-to-Sequence Model with Semantic Role Labels	Internal, Examining Committee
NOV 2021	Runjie (Sherry) Zhu	Ph.D.	EECS	Graph Attention Networks for Cross Lingual Entity Alignment and Its Applications	Internal, Examining Committee
OCT 2021	Malik Arham	M.A.Sc.	CIVIL	Artificial Intelligence-based Prediction of Permeable Pavement Surface Infiltration Rates	Internal, Examining Committee
MAY 2021	Ali Nasehzadeh	M.Sc.	EECS	A Deep RL-based Caching Strategy for Internet of Things Networks with Transient Data	<b>Chair,</b> Examining Committee
APR 2021	Mahmoud Afifi	Ph.D.	EECS	Image Color Correction, Enhancement, and Editing	<b>Chair,</b> 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	<b>Chair,</b> Examining Committee
SEP 2019	Mahdi Biparva	Ph.D.	EECS	Top-Down Selection in Convolutional Neural Networks	<b>Chair,</b> 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	<b>Chair,</b> Examining Committee
NOV 2018	Nima Shahbazi	Ph.D.	EECS	Discovery and Effective Use of Frequent Itemset Mining and Association Rules in Datasets	<b>Chair,</b> Examining Committee

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

DATES	STUDENT(S) NAME	WHAT	PROGRAM	PROJECT/READING COURSE
OCT 2023 – APR 2024	Pranav Gupta	Research Intern (LURA)		Deep learning models for the trajectory-user linking (TUL) problem
SEP 2023 – APR 2024	Shengxiong Wu	Software Project (EECS 4090)		Indoor navigation system (TBD)
MAY 2021 – AUG 2023	Nina Yanin	Research Intern (NSERC USRA, x2; LURA, x2)	EECS	Modeling and evaluation of location-based risk of epidemics using mobility data
SEP 2021 – APR 2022	Justin So	CS Project (EECS 4088)	EECS	Approximate big data analytics using data sketching techniques
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

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NOV 2023	Gian Alix	ACM SIGSPATIAL 2023 BEST PAPER RUNNER UP AWARD	31 <sup>ST</sup> ACM INTERN. CONF. ON ADVANCES IN GEOGRAPHIC INFORMATION SYSTEMS
WINTER 2024	Pranav Gupta	Lassonde Undergraduate Research Award (LURA)	LASSONDE SCHOOL OF ENGINEERING
SUMMER 2023	Nina Yanin	Undergraduate Student Research Award (USRA)	NSERC
WINTER 2023	Nina Yanin	Lassonde Undergraduate Research Award (LURA)	LASSONDE SCHOOL OF ENGINEERING
SUMMER 2022	Nina Yanin	Undergraduate Student Research Award (USRA)	NSERC
WINTER 2022	Nina Yanin	Lassonde Undergraduate Research Award (LURA)	LASSONDE SCHOOL OF ENGINEERING
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 <sup>ST</sup> 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,	IEEE MDM 2018 Best Paper Award	19 <sup>TH</sup> IEEE INTERNATIONAL CONFERENCE ON MOBILE DATA MANAGEMENT

Mahmood Afifi

# SERVICE (COMMITTEE MEMBERSHIP, EDITORIAL ACTIVITY, LEADERSHIP)

## COMMITTEE MEMBERSHIP

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### 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 LEVEL (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)

- 2023 – 2024 Member, Graduate Executive Committee
- 2023 – 2024 Chair, Faculty Hiring Search Committee (Computer Science – 2xCRCs AI/Robotics, Security, General)
- 2022 – 2023 Member, Faculty Hiring Search Committee (Computer Science – Data Science/Theory)
- 2021 – 2022 Member, Graduate Executive Committee
- 2021 – 2022 Member, Industry Partnership Program Committee
- 2021 – 2022 Member, Graduate Admissions Committee
- 2021 – 2022 Coordinator, Department Seminars (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 – Security)
- 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

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- 2022 – 2023 HFRI, Greece (Hellenic Foundation for Research & Innovation)

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)

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#### ACADEMIC JOURNAL EDITORIAL ACTIVITIES (REVIEWER / EXTERNAL REVIEWER)

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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 – PRESENT	Reviewer, IEEE Transactions on Knowledge and Data Engineering (TKDE)
2017/4 – PRESENT	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)

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#### CONFERENCE PROGRAM COMMITTEE MEMBER / REVIEWER

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2024	Program Committee Co-Chair, 25 <sup>th</sup> IEEE International Conference on Mobile Data Management (IEEE MDM 2024)
2024	Program Committee Member, ACM International Web Conference (ACM TheWebConf 2024)
2024	Program Committee Member, SIAM International Conference on Data Mining (SIAM SDM 2024)
2024	Program Committee Member, 17 <sup>th</sup> ACM International Conference on Web Search and Data Mining (ACM WSDM 2024)
2024	Program Committee Member, 37 <sup>th</sup> Canadian Artificial Intelligence Conference (Canadian AI 2024)
2023	Program Committee Member, 32 <sup>nd</sup> International Joint Conference on Artificial Intelligence (IJCAI 2023)
2023	Program Committee Member, 29 <sup>th</sup> ACM International Conf. on Knowledge Discovery & Data Mining (ACM KDD 2023)
2023	Program Committee Member, European Conf. on Mach. Learning and Principles & Practice of KDD (ECML/PKDD 2023)
2023	Program Committee Member, 32 <sup>nd</sup> ACM International Con. on Information and Knowledge Management (ACM CIKM 2023)
2023	Program Committee Member, 46 <sup>th</sup> Intern. Conf. on Research and Development in Information Retrieval (ACM SIGIR 2023)
2023	Program Committee Member, 33 <sup>rd</sup> International Conference on Computer Science and Software Engineering (CASCON 2023)
2023	Program Committee Member, 16 <sup>th</sup> ACM International Conference on Web Search and Data Mining (ACM WSDM 2023)
2022	Advanced Seminars Co-Chair, 23 <sup>rd</sup> IEEE International Conference on Mobile Data Management (IEEE MDM 2022)
2022	Program Committee Member, 28 <sup>th</sup> ACM International Conf. on Knowledge Discovery & Data Mining (ACM KDD 2022)

2022 Program Committee Member, European Conf. on Mach. Learning and Principles & Practice of KDD (ECML/PKDD 2022)

2022 Program Committee Member, 31<sup>st</sup> ACM International Conf. on Information and Knowledge Management (ACM CIKM 2022)

2022 Program Committee Member, 45<sup>th</sup> Intern. Conf. on Research and Development in Information Retrieval (ACM SIGIR 2022)

2022 Program Committee Member, 15<sup>th</sup> ACM International Conference on Web Search and Data Mining (ACM WSDM 2022)

2022 Program Committee Member, 32<sup>nd</sup> International Conference on Computer Science and Software Engineering (CASCON 2022)

2021 Local Organization Co-Chair, 22<sup>nd</sup> IEEE International Conference on Mobile Data Management (IEEE MDM 2021)

2021 Program Committee Member, 27<sup>th</sup> ACM International Conf. on Knowledge Discovery & Data Mining (ACM KDD 2021)

2021 Program Committee Member, 44<sup>th</sup> Intern. Conf. on Research and Development in Information Retrieval (ACM SIGIR 2021)

2021 Program Committee Member, 14<sup>th</sup> ACM International Conference on Web Search and Data Mining (ACM WSDM 2021)

2021 Program Committee Member, 30<sup>th</sup> ACM International Conf. on Information and Knowledge Management (ACM CIKM 2021)

2021 Program Committee Member, 22<sup>nd</sup> IEEE International Conference on Mobile Data Management (IEEE MDM 2021)

2021 Program Committee Member, 31<sup>st</sup> International Conference on Computer Science and Software Engineering (CASCON 2021)

2020 Program Committee Member, 29<sup>th</sup> ACM International Conf. on Information and Knowledge Management (ACM CIKM 2020)

2020 Program Committee Member, 43<sup>rd</sup> Intern. Conf. on Research and Development in Information Retrieval (ACM SIGIR 2020)

2020 Program Committee Member, 1<sup>st</sup> Asia-Pacific chapter of the Association for Computational Linguistics and the 9<sup>th</sup> International Joint Conference on Natural Language Processing (ACL-IJCNLP 2020)

2020 Program Committee Member, 30<sup>th</sup> International Conference on Computer Science and Software Engineering (CASCON 2020)

2019 Program Committee Member, 29<sup>th</sup> International Conference on Computer Science and Software Engineering (CASCON 2019)

2018 Program Committee Member, 25<sup>th</sup> ACM Conference on Information and Knowledge Management (ACM CIKM 2018)

2018 Reviewer, 44<sup>th</sup> International Workshop on Graph-Theoretic Concepts in Computer Science (WG 2018)

2018 Program Committee Member, 23<sup>rd</sup> IEEE Symposium on Computers and Communications (IEEE ISCC 2018)

2017 Program Committee Member, 26<sup>th</sup> ACM Conference on Information and Knowledge Management (ACM CIKM 2017)

2017 Reviewer, 16<sup>th</sup> International Symposium on Experimental Algorithms (SEA 2017)

2017 Program Committee Member, 22<sup>nd</sup> IEEE Symposium on Computers and Communications (IEEE ISCC 2017)

2015 Reviewer, 31<sup>st</sup> IEEE International Conference on Data Engineering (IEEE ICDE 2015)

2015 Reviewer, 18<sup>th</sup> International Conference on Extending Database Technology (EDBT 2015)

2014 Reviewer, 17<sup>th</sup> International Conference on Extending Database Technology (EDBT 2014)

2014 Reviewer, 20<sup>th</sup> ACM International Conference on Knowledge Discovery and Data Mining (ACM KDD 2014)

2013 Reviewer, 19<sup>th</sup> ACM International Conference on Knowledge Discovery and Data Mining (ACM KDD 2013)

2012 Reviewer, 23<sup>rd</sup> ACM Conference on Hypertext and Social Media (ACM HyperText 2012)

2010 Reviewer, 19<sup>th</sup> International World Wide Web Conference (WWW 2010)

2010 Reviewer, 19<sup>th</sup> ACM Conference on Information and Knowledge Management (ACM CIKM 2010)

2010 Reviewer, 21<sup>st</sup> ACM Conference on Hypertext and Social Media (ACM HyperText 2010)

2008 Reviewer, 14<sup>th</sup> ACM International Conference on Knowledge Discovery and Data Mining (ACM KDD 2008)

2007 Reviewer, 13<sup>th</sup> ACM International Conference on Knowledge Discovery and Data Mining (ACM KDD 2007)

2005 Reviewer, 4<sup>th</sup> International Semantic Web Conference (ISWC 2005)

2004 Reviewer, 3<sup>rd</sup> International Semantic Web Conference (ISWC 2004)

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#### WORKSHOP PROGRAM COMMITTEE MEMBER / REVIEWER

2011 Program Committee Member, 3<sup>rd</sup> International Workshop on Search and Mining User-generated Content (ACM SMUC 2011)

2010 Program Committee Member, 2<sup>nd</sup> International Workshop on Search and Mining User-generated Content (ACM SMUC 2010)

2009 Program Committee Member, 1<sup>st</sup> International Workshop on Monitoring Social Media (MSM 2009)

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#### LEADERSHIP

2023 – 2024 **Program Committee Co-Chair, IEEE MDM 2024**  
 As a co-chair of the program committee, I was responsible for the final scientific program of the IEEE MDM 2024 conference, hosted in Brussels, Belgium.

2021 – 2022 **Advanced Seminars Co-Chair, IEEE MDM 2022**



As a co-chair of advanced seminars committee, I coordinated the invitation and host of high caliber researchers and scientist to IEEE MDM 2022, which was hosted online.

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<sup>nd</sup> 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.