

MANOS PAPAGELIS

YORK UNIVERSITY, LASSONDE SCHOOL OF ENGINEERING
ELECTRICAL ENGINEERING & COMPUTER SCIENCE (LAS 3050)
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RESEARCH INTERESTS

Data mining, graph mining, machine learning, mobility data science, big data analytics, , 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 2024 – PRESENT **GRADUATE PROGRAM CO-DIRECTOR & VICE CHAIR, EECS DEPARTMENT**
Lassonde School of Engineering
Department of Electrical Engineering & Computer Science
- 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)

- NOV 2023 31ST 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 21ST IEEE INTERN. CONF. ON MOBILE DATA MANAGEMENT (IEEE MDM 2020) – **Best Paper Award**
- JUN 2018 19TH IEEE INTERN. CONF. ON MOBILE DATA MANAGEMENT (IEEE MDM 2018) – **Best Paper Award**
- JAN 2018 26TH 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

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: database 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

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 – 2026	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 (Connected Minds)
2023 – PRESENT	Member	The Mobility Innovation Center (MOVE)
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)
2025 – PRESENT	Member/Co-PI	Smart Mobility Advanced Research & Training (NSERC CREATE SMART)

PROFESSIONAL CONTRIBUTION & STANDING

PUBLICATIONS SUMMARY AND CITATION ANALYSIS (AS OF FEB 2026)

Number of citations (by Google scholar):	2500+
H-index (by Google scholar):	21
Number of Publications:	61
- <i>Journal articles (peer-reviewed):</i>	<i>15</i>
- <i>Conferences papers (peer-reviewed):</i>	<i>38</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:	4
- <i>Journal articles (peer-reviewed):</i>	<i>4</i>
- <i>Conferences papers (peer-reviewed):</i>	<i>0</i>
- <i>Patents (applications):</i>	<i>2</i>
Invited talks / Keynote talks	12
Open-source Software Releases	14
Technical reports (non-referred)	5
Citation analysis (by Google scholar):	http://goo.gl/3bi9m

INVITED LECTURES / KEYNOTE TALKS

DATE	TALK TITLE
OCT 30TH, 2025	AI-Driven Mobility Data Analytics (Ontario Traffic Council – OTC: Autonomous Vehicles and Connected Cities Symposium)
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)

- [19] *Faraji, A. & Papagelis, M., 2025. TraceHiding: Scalable Machine Unlearning for Mobility Data. *arXiv preprint arXiv:2509.17241*. **Submitted.**
- [18] *Arasteh, F., *Haghparast, A. & Papagelis, M., 2025. Network-Constrained Policy Optimization for Adaptive Multi-agent Vehicle Routing. *arXiv preprint arXiv:2510.26089*. **Major Revision requested.**
- [17] *Nadiri, A., *Li, J., *Abuoda, G., Biparva, M. & Papagelis, M. (2025). Mobility Network Forecasting: A Trajectory-based Contact Prediction Approach. **Major Revision submitted.**
- [16] *Alix, G., *Haghparast, A. & Papagelis, M. (2026). PathletRL++: Optimizing Trajectory Pathlet Extraction and Dictionary Formation via Reinforcement Learning. *ACM Transactions on Spatial Algorithms and Systems (ACM TSAS)*, pp. 1-38. **Accepted.**
- [15] *Nadiri, A., *Faraji, A., *Li, J., *Abuoda, G., & Papagelis, M. (2025). TrajLearn: Trajectory Prediction Learning using Deep Generative Models. *ACM Transactions on Spatial Algorithms and Systems (ACM TSAS)*, Vol. 11, Issue 3, pp. 1-33.
- [14] Babanejaddehaki, G., An, A., & Papagelis, M. (2025). Disease Outbreak Detection and Forecasting: A Review of Methods and Data Sources. *ACM Transactions on Computing for Healthcare (ACM HEALTH)*, Vol. 6, Issue 2, pp. 1-40.
- [13] Krylov, S.N., Krylova, S.M., Le, A.T., Moghadas, S.M., Mawani, A., Tabatabaei, N., Papagelis, M., Tsisis, P., Wiktorowicz, M.E. & Rosenbaum, R.S. (2025). A Policy Roadmap for Sustainable Mass-testing. *Health Affairs Scholar*, 3(8), p.qxaf151.
- [12] Haghayegh, F., Azad, A.Haghani, E., Rahimi, R., Feygin, A. Madhoun, F., Papagelis, M., Felfeli, T., Salahandish, R. (2025). Revolutionary Point-of-Care Wearable Diagnostics for Early Disease Detection and Biomarker Discovery through Intelligent Technologies. (**Advanced Science**). Vol 11, No 36, 2470220.
- [11] *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 TAFFC)*. 1 – 18.
- [10] *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.
- [9] *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.
- [8] *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.
- [7] *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**).
- [6] *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.
- [5] 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.

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.

- [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.
- [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.
- [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.
- [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. / [Elsevier EAAI top cited article 2005-2010 award](#).

CONFERENCE PAPERS (PEER-REVIEWED)

- [C38] *Quader, S., *Jaramillo, *N., Mukhopadhyay, S., *Abuoda, G., Zuzarte, C., Kalmuk, D., Litoiu, M., & [Papagelis, M.](#) (2026) LearnedWMP: Workload Memory Prediction Using Distribution of Query Templates. In *Proceedings of the International Conference on Extending Database Technology*, pp. 69-81 (**EDBT/ICDT 2026**).
- [C37] *Quader, S., *Abuoda, G., *Abokar, Y., Litoiu, M. & [Papagelis, M.](#) (2025). Demo of LearnedWMP: Workload Memory Prediction Using Deep Query Template Representations. In *Companion of the 2025 International Conference on Management of Data*, pp. 215-218 (**ACM SIGMOD 2025**).
- [C36] [Papagelis, M.](#) (2025). A Vision for Structured Experiential Mobility Intelligence. In *Proceedings of the 33rd ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems*, pp. 790-794, (**ACM SIGSPATIAL 2025**).
- [C35] *Nadiri, A., *Li, J., *Faraji, *A., Abuoda, G. and [Papagelis, M.](#) (2025). Generative Trajectory Forecasting via Transformers: The TrajLearn Framework. In *Proceedings of the 33rd ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems*, pp. 1306-1307 (**ACM SIGSPATIAL 2025**).
- [C34] Chandola, D., Altarawneh, E., Jenkin, M. & [Papagelis, M.](#) (2024). SERC-GCN: Speech Emotion Recognition in Conversation Using Graph Convolutional Networks. In *Proceedings of the IEEE International Conference on Acoustics, Speech & Signal Processing*, pp. 76-80 (**ICASSP 2024**).
- [C33] *Faraji, A., *Li, J., *Alix, G., *Alsaed, 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*, pp. 1-4 (**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*, pp. 1-12 (**ACM SIGSPATIAL 2023**). ([best paper runner up award](#)).
- [C31] *Alsaed, 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*, pp. 1-4 (**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*, pp. 1-12 (**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., *Alsaed, 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 4th 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 3rd 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)

[TR5] Altarawneh, E., Agrawal, A., Jenkin, M. & Papagelis, M., (2024). Knowledge-Aware Conversation Derailment Forecasting Using Graph Convolutional Networks. arXiv preprint arXiv:2408.13440.

[TR4] Altarawneh, E., Agrawal, A., Jenkin, M. & Papagelis, M. (2023). Predicting Evoked Emotions in Conversations. arXiv preprint arXiv:2401.00383.

[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

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.

SOFTWARE RELEASES

DATE	NAME	BRIEF DESCRIPTION	URL
2026	TRACEHIDING	A scalable, importance-aware machine unlearning framework for mobility trajectory data. TraceHiding removes specified user trajectories from trained deep models without full retraining.	https://github.com/alifa98/TraceHiding
2026	MOBINETFORECAST	A Transformer-driven framework that forecasts individual trajectories and infers future “contacts” (spatial collisions) of moving objects.	https://github.com/amir-ni/MobiNetForecast
2026	HHAN	A multi-agent reinforcement learning system for hub-based vehicle routing using the Attentive Q-Mixing (A-QMIX) architecture with SUMO traffic simulation.	https://github.com/Ariianhgh/HHAN
2025	TRAJLEARN	A transformer-based deep learning model for trajectory prediction using higher-order mobility flow representations (hexagonal grids).	https://github.com/amir-ni/trajectory-prediction
2025	PATHLETRL++	Optimized PathletRL model.	https://github.com/Ariianhgh/PathletRL
2023	PATHLETRL	A deep learning model based on reinforcement learning to construct compact trajectory pathlet dictionaries.	https://github.com/techGIAN/PathletRL
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.	https://github.com/alifa98/point2hex
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/xingzhao0/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>

RESEARCH FUNDING HISTORY

FUNDING PERIOD	ROLE	FUNDING AGENCY & RESEARCH PROPOSAL TITLE	FUNDING	STATUS
2025 – 2030	Co-Investigator (with 9 more)	NSERC Alliance Society: “Technologies for Economically Sustainable Mass-Testing: Empowering Individuals and Strengthening Public Health in Canada” (PI: Dr. Sergey N. Krylov)	\$1,000,000 over 5 years	Applied
2026 – 2029	Principal Investigator	Connected Minds Transformative Future Grant “MICROCOSM: Reimagining Human–Technology Co-Evolution Through Cognitive, Social & Autonomous Micromobility Ecosystems”	\$1,500,000 over 3 years	Applied
2025 – 2031	Co-Investigator (with 10 more)	NSERC CREATE, “Smart Mobility Advanced Research & Training (SMART)” (PI: Dr. Gunho Sohn)	\$1,650,000 over 6 years	Granted
2025 – 2026	Principal Investigator	NSERC RTI, “High-Performance Computing Infrastructure for AI and Data Science Research”	\$150,000	Granted
2025 – 2030	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)	\$1,977,500 over 5 years	Granted
2022 – 2027	Principal Investigator	NSERC DISCOVERY, “Deep Learning Models for Mobility Data Mining”	\$145,000 over 5 years	Granted
2021 – 2021	Principal Investigator	York AI Industry Partnership Fund, “Point-of-Sale (POS) Predictive Analytics for Retailer Business Optimization”	\$12,000 over 4 months	Granted
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)	SOSCIIP, “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	Principal Investigator	NSERC ENGAGE PLUS, “Evaluating the Operational Performance of Road Intersections by Mining Trajectory Data Streams”	\$14,286 over 6 months	Granted
2018 – 2019	Principal Investigator	NSERC ENGAGE, “Evaluating the Operational Performance of Road Intersections by Mining Trajectory Data Streams”	\$25,000 over 6 months	Granted
2018 – 2018	Principal Investigator	NSERC ENGAGE, “Ranking Experts in Location-aware Question-Answering Services”	\$25,000 over 6 months	Granted
2017 – 2022	Principal Investigator	NSERC DISCOVERY, “Mining and Exploration of the Social Graph: Theory and Applications”	\$100,000 over 5 years	Granted
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	Principal Investigator	York University Start-up Grant	\$150,000 over 4 years	Granted

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, F21, W22, F23, W24, SU24, F25, SU26
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 (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	W24	36	97.1%
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 th)	F25	46	97.6%
York University	EECS4414	Undergraduate (4 th)	SU24	34	94.1%
York University	EECS4414	Undergraduate (4 th)	W24	21	97.1%
York University	EECS4414	Undergraduate (4 th)	F23	23	94.2%
York University	EECS4414	Undergraduate (4 th)	W22	29	96.1%
York University	EECS4415	Undergraduate (4 th)	S21	60	92.3%
York University	EECS4414	Undergraduate (4 th)	F21	45	92.9%
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	100.0%
York University	EECS3421	Undergraduate (3 rd)	F19	98	90.2%
York University	EECS3421	Undergraduate (3 rd)	W19	92	93.0%
York University	EECS2031	Undergraduate (2 nd)	W18	122	~90-100% ²

SUPERVISION SUMMARY (JUL 2016 – PRESENT)

PROGRAM & DEGREE	#CURRENT	#GRADUATED	#TOTAL
EECS Postdoctoral Fellow (PDF)	1	1	2
EECS PhD	3	1	4
EECS MSc	2	13	15
EECS MASc	0	1	1
EECS MScAI	0	1	1
EECS Grad Research Project/Collaboration ³	0	11	11
EECS Undergrad	3	20	23
#Total	9	48	57

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
APR 2024 – PRESENT	Lei Liu	Ph.D.	EECS	Machine Learning for NLP/Conversational AI

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

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.

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
SEP 2023 – PRESENT	Nina Yanin	M.Sc.	EECS	Deep learning models for spatiotemporal data (TBD)
JAN 2023 – JAN 2024	Khoa Tran	M.Sc.AI	EECS	Deep learning text classification for skewed label sets using modified TextGCN and human pseudo-labels
SEP 2022 – JUN 2025	Ali Faraji	M.Sc.	EECS	Machine Unlearning for Mobility Data: An Algorithmic Perspective
SEP 2022 – JUN 2025	Amirhossein Nadiri	M.Sc.	EECS	Deep Generative Models for Trajectory Prediction and Mobility Network Forecasting
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
JAN 2025 – PRESENT	Alireza Norouziyazad	PhD	EECS	RBD	Supervisory Committee
SEP 2025 – PRESENT	Tam Thuc Do	PhD	EECS	TBD	Supervisory Committee
SEP 2021 – PRESENT	Farnaz Niknia	PhD	EECS	TBD	Supervisory Committee
SEP 2024 – PRESENT	Deeksha Chandola	PhD	EECS	TBD	Supervisory Committee
APR 2025 – SEP 2025	Negin Baghbazadeh	MSc	EECS	Multimodal Representation Learning in Medical Using Vision-Language Models	Supervisory Committee
JAN 2023 - PRESENT	Lwin Moe	PhD	EECS	Misinformation Detection and Mitigation: Natural Language Processing-Based Countermeasures	Supervisory Committee
AUG 2025 – FEB 2026	Shahak Rozenblat	M.Sc.	EECS	Inflammatory Biomarker Analysis from Wearable Sweat Patches via Smartphone-based Image Processing	Supervisory Committee
SEP 2024 – DEC 2025	Aaryaman Kartha	M.Sc.	EECS	Towards Agentic Vision Language Models for Question Answering on Interactive Dashboard	Supervisory Committee
JUN 2024 – DEC 2025	Haoqi Huang	M.Sc.	EECS	Anomaly Detection and Attack Mitigation in Federated Learning	Supervisory Committee
JUN 2024 – AUG 2025	Xavier Mootoo	M.Sc.	EECS	Modern Deep Learning Methods for Time Series Analysis	Supervisory Committee

APR 2024 – PRESENT	Erik Weiss (On leave)	Ph.D.	Physics	TBD	Supervisory Committee
FEB 2023 – DEC 2023	Arghya Kundu	M.Sc.	EECS	An Explainable Knowledge Graph Based Machine Learning Model for Fact Checking	Supervisory Committee
OCT 2022 – MAR 2024	Deeksha Chandola	M.Sc.	EECS	Speech Emotion Recognition in Conversations using Graph Convolutional Networks	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 – JUL 2024	Amirhossein Nourbakhshrezaei	Ph.D.	ESSE	Spatial quantum computation in graph optimization problems in transportation applications	Supervisory Committee
MAR 2021 – JAN 2026	Abhinav Tiwari	Ph.D.	EECS	Responsible Generative and Agentic Artificial Intelligence Frameworks for Autonomous Electric Vehicle Adoption	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
DEC 2019 – APR 2025	Yar Rouf	Ph.D.	EECS	Self-Adaptive Strategies for Cloud Applications	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
JUL 2025	Won Jeoung	MASc	CIVIL	Subscription and Per-Order Pricing in Temporally- Consolidated Delivery Systems: A Simulation-Optimization Approach	Internal, Examining Committee
SEP 2024	Evangelia Myrto Tzamali	Ph.D.	ESSE	New Generation Stochastic Data-driven Calibration of the Accelerometers and Modelling of the Non-gravitational Accelerations in GRACE missions	Internal, Examining Committee
AUG 2024	Saeed Abbasi	M.Sc.	EECS	Neural Document Segmentation Using Weighted Sliding Windows within Transformer Encoders	Internal, Examining Committee
AUG 2024	Wenhan Luo	M.Sc.	CIVIL	Dynamic Parking Pricing using Transaction Data	Internal, Examining Committee
MAY 2024	Saba Fallah	M.Sc.	EECS	Exploring Mid-air Gestures in Human-Computer Interfaces	Internal, Examining Committee

DEC 2023	Elanakayon Annalingam	M.Sc.	CIVIL	Optimizing Truck Parking Facilities with Major Distribution Centres in Pandemic Conditions	Internal, Examining Committee
OCT 2025	Amin Omidvar	Ph.D.	EECS	Empowering News Media by Improving the Quality of News Headlines using Machine Learning	Chair, 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	Chair, 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	External, 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	Chair, 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	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 2025 – PRESENT	Melina Najimi	Volunteer	EECS	Deep learning models for spatiotemporal data
FALL 2025 – PRESENT	Saba Yazdani	CS Project (EECS 4080) & Volunteer	EECS	Deep learning models for spatiotemporal data
MAY 2024 - PRESENT	Arian Haghparast	Research Intern (LURA, 2x)	EECS	Deep learning models for the trajectory pathlet dictionary construction problem
OCT 2023 – APR 2024	Pranav Gupta	Research Intern (NSERC USRA)	EECS	Deep learning models for the trajectory-user linking (TUL) problem
SEP 2023 – APR 2024	Shengxiong Wu	Software Project (EECS 4090)	EECS	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

SUMMER 2025	Jing Li	Research Internship/Visiting researcher program	NATIONAL INST. FOR INFORM. (NII), JAPAN
2024–2028	Jing Li	Connected Minds PhD Scholarship	CONNECTED MINDS
WINTER 2024	Arian Haghparast	Lassonde Undergraduate Research Award (LURA)	LASSONDE SCHOOL OF ENGINEERING
SUMMER 2024	Arian Haghparast	Lassonde Undergraduate Research Award (LURA)	LASSONDE SCHOOL OF ENGINEERING
WINTER 2024	Pranav Gupta	Undergraduate Student Research Award (USRA)	NSERC
NOV 2023	Gian Alix	ACM SIGSPATIAL 2023 BEST PAPER RUNNER UP AWARD	31 ST ACM INTERN. CONF. ON ADVANCES IN GEOGRAPHIC INFORMATION SYSTEMS
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 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	A. Sawas, A. Abuolaim, M. 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 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)

- 2024 – PRESENT Graduate Program Co-Director (MSc, MScAI programs) & Vice Chair
- 2024 – PRESENT Vice Chair, Department of Electrical Engineering and Computer Science (EECS)
- 2024 – 2025 Co-Chair, Graduate Executive Committee
- 2024 – 2025 Member, Executive Committee
- 2023 – 2024 Member, Graduate Executive Committee
- 2023 – 2024 Chair, Faculty Hiring Search Committee (Computer Science – AI, Security, Theory, Open CS)
- 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

2019 – PRESENT National Science and Engineering Research Council Discovery Grants (NSERC DG)
2022 – 2023 HFRI, Greece (Hellenic Foundation for Research & Innovation)
2020 FONDECYT, Chile (The National Fund for Scientific and Technological Development)
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)
2024/6 – PRESENT Reviewer, GeoInformatica (GeoInformatica)
2021/1 – PRESENT Reviewer, ACM Transactions on Spatial Algorithms and Systems (TSAS)
2021/1 - PRESENT Reviewer, IEEE Transactions on Network Science and Engineering (TNSE)
2020/6 – PRESENT Reviewer, IEEE Transactions on Computing (TC)
2020/1- 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)

CONFERENCE PROGRAM COMMITTEE MEMBER / REVIEWER

2026 Program Committee Member, European Conf. on Mach. Learning and Principles & Practice of KDD (ECML/PKDD 2026)
2026 Program Committee Member, 49th Intern. Conf. on Research and Development in Information Retrieval (ACM SIGIR 2026)
2026 Program Committee Member, ACM International Web Conference (ACM TheWebConf 2026)
2026 Program Committee Member, 40th Annual AAAI Conference on Artificial Intelligence (AAAI 2026)
2026 Program Committee Member, 19th ACM International Conference on Web Search and Data Mining (ACM WSDM 2026)
2026 Program Committee Member, 39th Canadian Artificial Intelligence Conference (Canadian AI 2026)
2025 Program Committee Member, 17th Intern. Conference on Advances in Social Networks Analysis and Mining (ASONAM 2025)
2025 Program Committee Member, 34th ACM International Con. on Information and Knowledge Management (ACM CIKM 2025)
2025 Program Committee Member, European Conf. on Mach. Learning and Principles & Practice of KDD (ECML/PKDD 2025)

2025 Program Committee Member, 35th International Conference on Computer Science and Software Engineering (CASCON 2025)

2025 Program Committee Member, 48th Intern. Conf. on Research and Development in Information Retrieval (ACM SIGIR 2025)

2025 Program Committee Member, 26th IEEE International Conference on Mobile Data Management (IEEE MDM 2025)

2025 Poster Track Co-Chair, 31st ACM International Conf. on Knowledge Discovery & Data Mining (ACM KDD 2025)

2025 Program Committee Member, 31st ACM International Conf. on Knowledge Discovery & Data Mining (ACM KDD 2025)

2025 Program Committee Member, ACM International Web Conference (ACM TheWebConf 2025)

2025 Program Committee Member, 39th Annual AAAI Conference on Artificial Intelligence (AAAI 2025)

2025 Program Committee Member, 18th ACM International Conference on Web Search and Data Mining (ACM WSDM 2025)

2025 Program Committee Member, 38th Canadian Artificial Intelligence Conference (Canadian AI 2025)

2024 Program Committee Member, 30th ACM International Conf. on Knowledge Discovery & Data Mining (ACM KDD 2024)

2024 Program Committee Member, European Conf. on Mach. Learning and Principles & Practice of KDD (ECML/PKDD 2024)

2024 Program Committee Member, 34th International Conference on Computer Science and Software Engineering (CASCON 2024)

2024 Program Committee Member, 47th Intern. Conf. on Research and Development in Information Retrieval (ACM SIGIR 2024)

2024 Program Committee Co-Chair, 25th 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, 17th ACM International Conference on Web Search and Data Mining (ACM WSDM 2024)

2024 Program Committee Member, 37th Canadian Artificial Intelligence Conference (Canadian AI 2024)

2023 Program Committee Member, 32nd International Joint Conference on Artificial Intelligence (IJCAI 2023)

2023 Program Committee Member, 29th 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, 32nd ACM International Con. on Information and Knowledge Management (ACM CIKM 2023)

2023 Program Committee Member, 46th Intern. Conf. on Research and Development in Information Retrieval (ACM SIGIR 2023)

2023 Program Committee Member, 33rd International Conference on Computer Science and Software Engineering (CASCON 2023)

2023 Program Committee Member, 16th ACM International Conference on Web Search and Data Mining (ACM WSDM 2023)

2022 Advanced Seminars Co-Chair, 23rd IEEE International Conference on Mobile Data Management (IEEE MDM 2022)

2022 Program Committee Member, 28th 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, 31st ACM International Conf. on Information and Knowledge Management (ACM CIKM 2022)

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

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

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

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

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, 22nd IEEE International Conference on Mobile Data Management (IEEE MDM 2021)

2021 Program Committee Member, 31st International Conference on Computer Science and Software Engineering (CASCON 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, 1st Asia-Pacific chapter of the Association for Computational Linguistics and the 9th International Joint Conference on Natural Language Processing (AAACL-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, 22nd IEEE Symposium on Computers and Communications (IEEE ISCC 2017)
- 2015 Reviewer, 31st 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

- 2024 – PRESENT **EECS Graduate Program Co-Director (Co-GPD)**
As a Co-GPD, I am responsible for overseeing the academic and administrative aspects of the EECS department's graduate program. This involves ensuring the program's quality, advising students on academic and research matters, coordinating with faculty, managing admissions and program policies, and handling key administrative tasks like scheduling and budget management. Additionally, the role involves advocating for student needs, resolving conflicts, and fostering external partnerships to enhance opportunities for graduate students.
- 2024 – PRESENT **EECS Vice Chair**
As a Co-GPD, I am participating in the Executive Committee of the EECS department, assuming the role of a Vice Chair. In this role, I support the Department Chair in the academic and administrative leadership of the department. The role typically involves overseeing key portfolios, with emphasis on graduate programs, curriculum development, policy implementation, and faculty and student affairs. I also help coordinate departmental initiatives, ensuring alignment with faculty and university priorities.
- 2026 – PRESENT **Program Steering Committee, NSERC CREATE SMART**
As a member of the Program's Steering committee, I provide strategic governance for the \$1.65M program by aligning research and training with industry and community needs, overseeing deliverables (new courses and Living Lab demos), reviewing NSERC progress reporting, and ensuring all DEDI recruitment and training commitments are met.
- 2025 – PRESENT **Executive Committee Member, Mobility Innovation Center (MOVE)**
As a member of the Executive Committee, focusing on Large Grants, I provide strategic governance for major, multi-partner mobility grant initiatives by shaping funding priorities, strengthening partnerships, and overseeing proposal development, delivery, and accountability for large-scale awards.
- 2025 – 2026 **PhD Forum Co-Chair, IEEE MDM 2026**
As a co-chair of the PhD Forum committee, I was responsible for organizing and running the forum by soliciting and selecting PhD student submissions and coordinating the forum session(s), mentoring small-group discussions, and the career-path panel to ensure students can present their work and receive constructive feedback.
- 2024 – 2025 **Poster Track Co-Chair, ACM KDD 2025**
As a co-chair of the poster track, I am responsible for the final scientific program of the poster session of the ACM KDD 2025 conference, hosted in Toronto, Canada.
- 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 scientists 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 22nd 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 Hobas 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.