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SAIEDEH RAZAVI

BUSINESS ADDRESS

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EDUCATIONAL BACKGROUND

Degrees and Diplomas

2010 Ph.D., Department of Civil and Environmental Engineering, University of Waterloo, Waterloo, ON, Canada
Thesis: "Data Fusion for Location Estimation in Construction" Supervisor: Dr. Carl Haas

2002 M.Sc., Artificial Intelligence, Department of Computer Engineering, Iran University of Science and Technology, Tehran, Iran
Thesis: "Urban Traffic Quantitative Analysis Using Image Processing and Time-Delayed Neural Networks.", Supervisor: Dr. Mahmood Fathy

1996 B.Sc., Software Engineering, Department of Computer Engineering, Sharif University of Technology, Tehran, Iran
Thesis: "Library Information Management System Using Barcode", Supervisor: Dr. Amir H. Jahangir.

Other Specialized Training

2011 Postdoctoral Fellowship, Construction Automation, Building, Civil, and Engineering Dept., Concordia University, Montreal, QC, Canada

CURRENT STATUS AT MCMASTER

07/2022 – Present Professor, Tenured, Civil Engineering Department
07/2012 – Present Associate member of the School of Earth, Environment, and Society
07/2011 – Present Chair in Heavy Construction, Civil Engineering Department

PROFESSIONAL ORGANIZATIONS

2017 – Present	Transportation Association of Canada (TAC)
2011 – Present	Intelligent Transportation Systems (ITS) Canada
2010 – Present	American Society of Civil Engineers (ASCE), member
2010 – Present	Canadian Society of Civil Engineering (CSCE), member
2006 – Present	Institute of Electrical and Electronics Engineers (IEEE)
2010 – Present	International Association for Automation and Robotics in Construction
2015 – 2023	Professional Engineers of Ontario (PEO), EIT

EMPLOYMENT HISTORY

Academic

07/2022 – Present	Professor, Tenured, Civil Engineering Department, McMaster University, Hamilton, ON, Canada
09/2022 – 01/2023	Acting Director, McMaster Institute for Transportation and Logistics (MITL), McMaster University, Hamilton, ON, Canada
07/2017 – 06/2022	Director, McMaster Institute for Transportation and Logistics (MITL), McMaster University, Hamilton, ON, Canada
07/2016 – 06/2022	Associate Professor, Tenured, Civil Engineering Department, McMaster University, Hamilton, ON, Canada
07/2012 – Present	Associate Member, School of Earth, Environment, and Society, McMaster University, Hamilton, ON, Canada
07/2011 – Present	Endowed Chair in Heavy Construction, Civil Engineering Department, McMaster University, Hamilton, ON, Canada
07/2011 – 07/2016	Assistant Professor, Tenure-Track, Civil Engineering Department, McMaster University, Hamilton, ON, Canada
04/2013 – 04/2014	Associate Member, Electrical and Computer Engineering Department, McMaster University, Hamilton, ON, Canada
07/2010 – 06/2011	Postdoctoral Fellow, Construction Automation lab, Building, Civil, and Engineering Dept., Concordia University, Montreal, QC, Canada
01/2006 – 06/2010	Research Assistant, Automation in Construction Lab, Civil and Environmental Engineering Dept., University of Waterloo, Waterloo, ON, Canada
09/2004 – 04/2005	Research Assistant, Image Processing Lab, Iran University of Science and Technology, Computer Engineering Dept., Tehran, Iran
09/2000 – 08/2002	Research Assistant, Intelligent Transportation Systems (ITS) Lab, Iran University of Science and Technology, Computer Engineering Dept., Tehran, Iran

Other

08/2003 – 02/2004	Research Coordinator, Intelligent Transportation System (ITS) Group, Iran Transportation Research Centre, Tehran, Iran
03/1997 – 07/2003	Research & Development Engineer, Tehran Municipality Computer Services Organization, Tehran, Iran
03/1996 – 02/1997	Technical Support & System Administrator, Tehran Municipality Computer Services Organization, Tehran, Iran

SCHOLARLY AND PROFESSIONAL ACTIVITIES

Editorial Boards

2011 – 2023	Associate Editor of the ASCE Journal of Computing in Civil Engineering
2020 – 2022	Associate Editor of the Canadian Journal of Civil Engineering

Grant & Personnel Committees

2020 – 2023	Member, NSERC Discovery Grant Evaluation Group in Civil, Industrial and Systems Engineering (35-45 proposal reviews annually)
2021 – 2022	Selection Committee Member, Tier II Canada Research Chairs, McMaster University
2020 – 2021	Evaluation Committee Member, McMaster COVID-19 Research Fund (reviewed 26 proposals)
2020 – 2021	Selection Committee Member, McMaster School of Engineering Practice, McMaster University
2019 – 2020	Selection Committee Member, Director, McMaster Centre for Software Certification (McSCert), McMaster University
2019 – 2020	Selection Committee Member, Associate Dean Academic, Faculty of Engineering, McMaster University
2018 – 2019	Selection Committee Member, Associate Dean Graduate Studies, Faculty of Engineering, McMaster University
2018 – 2019	Selection Committee Dean's Representative, Don Pether Chair in Engineering Management, Faculty of Engineering, McMaster University
2017 – 2018	Selection Committee Member, Multiple Tenure Track Faculty Positions in Transportation, Civil Engineering Department, McMaster University
2017 – 2018	Selection Committee Member, Tenure Track Faculty Positions in Risk and Smart Systems, Civil Engineering Department, McMaster University
2015 – 2016	Selection Committee Member, Joe NG/JNE Consulting Chair Renewal, Civil Engineering Department, McMaster University
2014 – 2015	Selection Committee Dean's Representative, Tenure Track Faculty Positions in Process System Engineering, Chemical Engineering Department, McMaster University

Executive Positions

2023 – 2025	Organizing Committee Member and Track Chair, IEEE International Conference on Smart Mobility2024 (IEEE SM'24), Niagara Falls, Canada.
2021 – Present	Co-founder and Co-director of McMaster AI-Enhanced Mobility Lab (AeML)
2020 – Present	Board of Directors (BOD) member, International Association for Automation and Robotics in Construction (IAARC)
2020 – 2023	Advisory Group Member, Hamilton Truck Route Master Plan
2021 – 2022	Associate Chair Graduate Studies, McMaster Department of Civil Engineering (Term 1)
2020 – 2022	Steering Committee Member, Fluid Intelligence: HOPA-McMaster Supply Chain Data Analytics Unit
2020 – 2021	Member, Provincial Hamilton Transportation Task Force (HTTF)
2016 – 2017	Co-organizer, Transportation Research Board (TRB 2017) technical workshop on "Opportunities and challenges of big data applications in transportation project delivery and management", Washington, D.C., USA
2016 – 2017	Technical Committee member, International Workshop on Computing for Civil Engineering (IWCCE 2017), held in Seattle, WA., USA
2015 – 2016	Co-organizer, Transportation Research Board (TRB 2016) technical workshop on "Cyber-Physical Systems in Construction", held in Washington, D.C., USA
2015 – 2016	Scientific Committee member, 16th International Conference on Computing in Civil and Building Engineering (ICCCBE2016), held in Osaka, Japan
2012 – 2013	Organizing Committee member, 3rd Canadian Student Colloquium, National Research Council of Canada
2011 – 2013	Organizing Committee Member, International Symposium on Automation and Robotics in Construction (ISARC2013), held in Montreal, QC

Journal Referee

IEEE Transactions on Intelligent Transportation Systems
IEEE Transactions on Vehicular Technology
Journal of Accident Analysis and Prevention
Journal of Transportation Research Part C: Emerging Technologies
Transportation Research Part A: Policy and Practice
Journal of Traffic and Transportation Engineering
ASCE Journal of Computing in Civil Engineering
Journal of Engineering Informatics
ASCE Journal of Construction Engineering and Management
Journal of Automation in Construction
Canadian Journal of Civil Engineering
Journal of Sensors
Journal of Simulation Modeling Practice and Theory

External Grant Reviews

NSERC Discovery Grant, 2013, 2016, 2018, 2019, 2020 (5 applications for the 2020 competition), 2021 (35 applications), 2022 (38 applications), 2023 (35 applications)
NSERC Alliance 2020, 2022
Canada Research Chair Renewal 2022 (2 proposals), 2025 (1 proposal)
McMaster Covid-19 Research Fund (26 proposals)
Mitacs Accelerate Grant, 2018, 2020. 2024
NSERC IDEA, 2019
CFI-JELF, 2019
NSERC CRD Grant review, 2017

AREAS OF INTEREST

Research

Data- and AI-Driven Construction, Transportation, Supply Chain, Logistics, and Infrastructure Management with applications in

Smart and Connected Construction Work Zone
Smart Cities and Smart Corridors
Smart Ports
Connected Communities

Teaching

Construction Engineering and Management
Intelligent Transportation Systems
Civil Engineering Systems
Machine Intelligence in Civil Engineering Systems
Telematics Sensing in Civil Engineering

HONOURS

2022 Dean's Doctoral Mentoring Gold Honor Roll, McMaster Faculty of Engineering
2021 Dean's Doctoral Mentoring Gold Honor Roll, McMaster Faculty of Engineering
2021 Ron Rice Award for the Best Conference Paper at the 2021 Canadian Transportation Research Forum (CTRF) Annual Conference
2020 Dean's Doctoral Mentoring Gold Honor Roll, McMaster Faculty of Engineering
2019 Best Paper Award of the Safety Technical Group of Human Factors and Ergonomics Society (HFES) for the paper on "Network-Based Safety Leading indicators for Safety Risk Analysis in Construction"
2018 NSERC Discovery Accelerator Supplement (DAS) in recognition of the well-established research program and strong potential to become an international leader in the respective areas of research.
2015 McMaster Faculty of Engineering Dean's Team Excellence Award, for bridging an industry-academia partnership in learning through Heavy Construction Internship Program, McMaster Faculty of Engineering, co-recipient
2014 Chrysler Innovation Award for the Automotive Partnership Canada (APC) project entitled "Next Generation Affordable Electrified Powertrains with Superior Energy Efficiency and Performance-Leadership in Automotive Powertrain (LEAP), co-recipient
2013 McMaster Students Union (MSU) Merit Award for Teaching
2009 NSERC Visiting Fellowship in Canadian Government Laboratories
2009 NSERC Industrial Research and Development Fellowship
2009 CII Best Poster Award for a poster on "Automated Materials Locating and Tracking" at the 26th Anniversary Conference of the Construction Industry Institute (CII)
2009 Transportation Association of Canada (TAC) Scholarship, $5,000
2009 University of Waterloo Doctoral Thesis Award

COURSES TAUGHT

Undergraduate

Year	Role/Title	Course Code/Title	Term	Section (C01, L01, T01)	% Taught	Enrolment	Duration	Additional Comments
2024-2025	Instructor	CIVENG 4CA4/ Construction Management and Automation	1	C01, L01	100%	73	14 weeks	
2024-2025	Instructor	CIVENG 3K03/Introduction to Transportation Engineering	1	C01, L01	100%	144	14 weeks	Fully revised course
2024-2025	Instructor	CIVENG 4Z04B/ Independent Study	1 &2	C01	100%	1	28 weeks	Yizhuo Chen
2023-2024	Instructor	CIVENG 4CA4/ Construction Management and Automation	1	C01, L01	100%	79	14 weeks	Offering the course on behalf of a colleague on sabbatical
2023-2024	Instructor	CIVENG 3K03/Introduction to Transportation Engineering	1	C01, L01	100%	145	14 weeks	First time Teaching the Course
2022-	Instructor	CIVENG 4CM4/	1	C01, L01	100%	81	14 weeks	

2023		Advanced Construction Eng. & Mgt.						
2021-2022	Instructor	CIVENG 4Z04B/ Independent Study	1 &2	C01	100%	1	28 weeks	Zehau Shuai
2020-2021	Instructor	CIVENG 3RR3/ Eng. Economics and Project Mgt.	2	C01, L01	100%	117	14 weeks	Virtual Classroom
2020-2021	Instructor	CIVENG 4CM4/ Advanced Const. Eng. & Mgt.	1	C01, L01	100%	80	14 weeks	Virtual Classroom
2019-2020	Instructor	CIVENG 3RR3/ Eng. Economics and Project Mgt.	2	C01, L01	100%	86	14 weeks	3 Weeks of Virtual Classroom
2019-2020	Instructor	CIVENG 4CM4/ Construction Eng. & Mgt.	1	C01, L01	100%	70	14 weeks	
2018-2019	Instructor	CIVENG 3RR3/ Eng. Economics and Project Mgt.	2	C01, L01	100%	90	14 weeks	
2018-2019	Instructor	CIVENG 4CM4/ Advanced Construction Eng. & Mgt.	1	C01, L01	100%	58	14 weeks	
2016-2017	Instructor	CIVENG 3RR3/ Eng. Economics and Project Mgt.	2	C01, L01	100%	94	14 weeks	
2016-2017	Instructor	CIVENG 4CM4/ Construction Eng. & Mgt.	2	C01, L01	100%	55	14 weeks	
2016-2017	Instructor	CIVENG 4Z04B/ Independent Study	1 &2	C01	100%	2	28 weeks	Kyle Doucette, Eric Goforth,
2016-2017	Instructor	CIVENG 4CM4/ Advanced Construction Eng. & Mgt.	1	C01, L01	100%	28	14 weeks	Due to industry engagement in experiential component, class was capped at 50
2015-2016	Instructor	CIVENG 4CM4/ Construction Eng. & Mgt.	2	C01, L01	100%	50	14 weeks	Due to industry engagement in experiential component, class was capped at 50
2015-2016	Instructor	CIVENG 4CM4/ Construction Eng. & Mgt.	2	C02, L01	100%	25	14 weeks	Due to industry engagement in experiential component, class was capped at 50
2015-2016	Instructor	CIVENG 3RR3/ Eng. Economics and Project Mgt.	1	C01, L01	100%	96	14 weeks	
2014-2015	Instructor	CIVENG 4CM4/ Construction Eng. & Mgt.	2	C01, L01	100%	45	14 weeks	Due to industry engagement in experiential component, class was capped at 50
2014-2015	Instructor	CIVENG 4CM4/ Construction Eng.	2	C02, L01	100%	38	14 weeks	Due to industry engagement in

		& Mgt.						experiential component, class was capped at 50
2014-2015	Instructor	CIVENG 3RR3/ Eng. Economics and Project Mgt.	1	C01, L01	100%	70	14 weeks	
2013-2014	Instructor	CIVENG 4CM4/ Advanced Construction Eng. & Mgt.	2	C01, L01	100%	38	14 weeks	Due to industry engagement in experiential component, class was capped at 50
2013-2014	Instructor	CIVENG 4CM4/ Advanced Construction Eng. & Mgt.	2	C02, L01	100%	31	14 weeks	Due to industry engagement in experiential component, class was capped at 50
2013-2014	Instructor	CIVENG 3RR3/ Eng. Economics and Project Mgt.	1	C01, L01	100%	92	14 weeks	
2012-2013	Instructor	CIVENG 3RR3/ Eng. Economics and Project Mgt.	2	C01, L01	100%	65	14 weeks	
2012-2013	Instructor	CIVENG 4CM4/ Advanced Construction Eng. & Mgt.	2	C01, L01	100%	98	14 weeks	
2012-2013	Instructor	CIVTECH 4ES3/Modelling Engineering Systems	2	C01, L01	100%	34	14 weeks	
2011-2012	Instructor	CIVENG 4CM4/ Advanced Construction Eng. & Mgt.	2	C01, L01	100%	71	14 weeks	
2011-2012	Instructor	CIVENG 3RR3/ Eng. Economics and Project Mgt.	1	C01, L01	100%	91	14 weeks	

Graduate

Year	Role/Title	Course Code/Title	Term	% Taught	Enrolment	Duration	Additional Comments
2024-2025	Instructor	CIVENG 723/Machine Intelligence in Civil Engineering Systems	2	100%	12	13 weeks	New Course
2022-2023	Instructor	CIVENG 704/Computational Intelligence in Transportation and Supply Chain	2	100%	4	14 weeks	New Course
2019-2020	Instructor	CIVENG 6CM4/ Advanced Construction Eng. & Mgt.	1	100%	2	14 weeks	
2018-2019	Instructor	CIVENG 6CM4/ Advanced Construction Eng. & Mgt.	1	100%	1	14 weeks	
2016-	Instructor	SEP 702/ Systems & Eng.	2	33%	15	14 weeks	

2017		Public Policy					
2016-2017	Instructor	CIVENG 6CM4/ Advanced Construction Eng. & Mgt.	1	100%	2	14 weeks	
2015-2016	Instructor	CIVENG 6CM4/ Advanced Construction Eng. & Mgt.	2	100%	3	14 weeks	
2015-2016	Instructor	SEP 702/ Systems & Eng. Public Policy	2	33%	11	14 weeks	
2014-2015	Instructor	CIVENG 6CM4/ Advanced Construction Eng. & Mgt.	2	100%	4	14 weeks	

CONTRIBUTIONS TO TEACHING PRACTICE

Leadership in Delivery of Educational Programs

Facilitated industry and practitioners' involvement in construction and project management educational programs at McMaster by:

Experiential Learning through Real-world Term Projects for Courses in Collaboration with Industry

2023 – 2024	Facilitated a term project to plan traffic signal timing for one of the intersections in Hamilton, through intersection observation and application of fundamental principles of traffic flow and the associated signalized intersection engineering knowledge in CIVENG 3K03
2023 – 2024	Facilitated a term project for students to submit bid proposals o design, estimate, and schedule a modern yet sustainable Recreational Centre project in the Westdale neighbourhood in Hamilton, CIVENG 4CA4
2018 – 2019	McMaster Facility Services offered the term project on "Invitation to Submit Bid Proposals to McMaster Facility Services for Cootes Drive underpass rehabilitation, Main Campus to Westaway Road", CIVENG 3RR3
2017 – 2018	Mechanical Contractors Association of North America offered term project on "Invitation to Submit Bid Proposals to the University of California Davis for the Segundo Student Services Center", CIVENG 3RR3
2016 – 2017	Aecon Group Inc. offered term project on "Highway 69 Scheduling Optimization", 2016-2017 Term 2 CIVENG 4CM4 Term Project
2016 – 2017	Aecon Group Inc. offered term project on "Highway 401 Rapid Bridge Replacement Scheduling and Cost Optimization", 2016-2017 Term 1 CIVENG 4CM4 Project.
2015 – 2016	McMaster Facility Services offered "Invitation to Submit Bid Proposals to the Advanced Dynamics Lab Water Main Replacement", CIVENG 3RR3

Invited Guest Speakers from Industry and Academia

2024 – 2025	Dr. Wade Genders, Flow Labs, "Autonomous Traffic Management Systems: Enter the Matrix", presented in CIVENG 723
2024 – 2025	Dr. Ali Hadayeghi, Vice President, Transportation, CIMA+, "Vision Zero", presented in CIVENG 3K03
2024 – 2025	Dr. Chris Raymond, Senior Advisor to EGIS group, " A Road Industry Perspective on Construction Contracts and Risks", presented in CIVENG 4CA4
2024 – 2025	Omar Shams, Senior Transportation Planner, City of Toronto, "Urban Travel Demand Modeling", presented in CIVENG 3K03
2024 – 2025	Graeme Langdon, Operations Director, Alberici Constructors, Ltd., "The Lifecycle of an Infrastructure Project", presented in CIVENG 4CA4

2024 – 2025	John Serafini, Safety Manager at Dufferin Construction Co., “Construction Health and Safety and the Law & Human Performance”, presented in CIVENG 4CA4
2023 – 2024	Omar Shams, Project Manager, Department of Transportation Planning-New Initiatives, City Of Hamilton, “Urban Travel Demand Modeling”, presented in CIVENG 3K03
2023 – 2024	John Serafini, Safety Manager at Dufferin Construction Co., “Health and Safety and the Law & Human Performance”, presented in CIVENG 4CA4
2022 – 2023	Dr. Wade Genders, Flow Labs, “Reinforcement Learning for Adaptive Signal Control”, presented in CIVENG 704
2022 – 2023	John Serafini, Safety Manager at Dufferin Construction Co., “Health and Safety and the Law & Human Performance”, presented in CIVENG 4CM4
2020 – 2021	John Serafini, Safety Manager at Dufferin Construction Co., “Health and Safety and the Law & Human Performance”, presented in CIVENG 4CM4
2019 – 2020	Sean Larse, John Deere Construction & Forestry, Construction Telematics and Grade Control”, presented in CIVENG 4CM4
2019 – 2020	John Serafini, Safety Manager at Dufferin Construction Co., “Construction Health, Safety and Law”, presented in CIVENG 4CM4
2018 – 2019	Norm Hawton, Director of Design and Construction at McMaster, “Role of McMaster in the bid process and sample projects”, CIVENG 3RR3
2018 – 2019	John Serafini, Safety Manager at Dufferin Construction Co., “Construction Health, Safety and Law”, presented in CIVENG 4CM4
2016 – 2017	Mike Di Lallio and George Marion, MCAH, “Time Value of Money; Measuring Cost & Reducing Cost”, presented in CIV ENG 3RR3, March 3, 2017
2016 – 2017	Brenda Liegler (MTO), Corey McNair (Ellisdon), and Daniel Green (MMM), Panel Discussion on “Alternative Contracting and Delivery Methods”, presented in CIV ENG 3RR3, Jan. 20, 2017
2016 – 2017	John Serafini, Safety Manager at Dufferin Construction Co., “Construction Health, Safety and Law”, presented in CIVENG 4CM4
2015 – 2016	Dr. Mohamed Attalla, McMaster Assistant Vice President, Facility Services, “Construction Contracts and Delivery Methods”, presented in CIV ENG 3RR3, Sep. 23, 2015
2015 – 2016	John Serafini, Safety Manager at Dufferin Construction Co., “Construction Health, Safety and Law”, presented in CIVENG 4CM4, Feb. 2016
2015 – 2016	Mike Di Lallio and George Marion, MCAH, “Time Value of Money; Measuring Cost & Reducing Cost”, presented in CIV ENG 3RR3, Nov. 6, 2015
2014 – 2015	Michael Boyer, Matrix NAC Inc., “Resource Management in Construction”, presented in CIV ENG 4CM4, March 3 & 6, 2015
2014 – 2015	John Serafini, Safety Manager at Dufferin Construction Co., “Construction Health, Safety and Law”, presented in CIVENG 4CM4, Feb 24 &17, 2015
2014 – 2015	Mike Di Lallio and George Marion, MCAH, “Time Value of Money; Measuring Cost & Reducing Cost”, presented in CIV ENG 3RR3, Nov. 4, 2014
2014 – 2015	Brenda Liegler, Ministry of Transportation Ontario (MTO), “MTO’s Innovative Contracting Methods”, presented in CIV ENG 4CM4, Sep. 25, 2014
2013 – 2014	John Serafini, Safety Manager at Dufferin Construction Co., “Construction Health, Safety and Law”, presented in CIVENG 4CM4, Feb 5 & 6, 2014
2013 – 2014	George Marion, Mike Di Lallio, Alberici Constructors, “Time Value of Money; Measuring Cost & Reducing Cost”, presented in CIV ENG 3RR, Nov. 2013
2013 – 2014	Brenda Liegler, Ministry of Transportation Ontario (MTO), “MTO’s alternative contracting”, presented in CIV ENG 4CM4, Sep. 25, 2013
2012 – 2013	Tony Cupido, McMaster University, “Sustainability in Construction”, presented in CIV ENG 4CM4, March 2013
2012 – 2013	Ryan Farrish and John Serafini, Dufferin Construction Co., “Construction Safety”, presented in CIV ENG 4CM4, Feb 1, 2013
2012 – 2013	George Marion and Mike Di Lallio, Alberici Constructors, “Time Value of Money; Measuring Cost & Reducing Cost”, presented in CIV ENG 3RR3, Nov. 2, 2012
2012 – 2013	Dr. Mohammad Attalla, McMaster Assistant Vice President, Facility Services, “Construction Contracts and Delivery Methods, presented in CIV ENG 3RR3, Sep. 25th, 2012

2012 – 2013	Jon Boktor, MA Mortenson Construction, "Building Information Modeling – Industry Practice and Research State", presented in CIV ENG 4CM4, March 28th, 2012.
2011 – 2012	Autodesk Revit Representative, Autodesk Co., "Building Information Modeling (BIM) – Software Tutorial", presented in CIV ENG 4CM4 via tele-conferencing, March 2, 2012.
2011 – 2012	Chris Little, Modern Niagara Toronto Inc., "Building Information Modeling – Industry Perspective", presented in CIV ENG 4CM4, March 14, 2012
2011 – 2012	Ryan Farrish and John Serafini, Dufferin Construction Co., "Construction Safety", presented in CIV ENG 4CM4, March 12, 2012
2011 – 2012	Dr. Ralph Haas, University of Waterloo, "Infrastructure Asset Management", presented in CIV ENG 4CM4, Feb. 29, 2012
2011 – 2012	George Marion and Mike Di Lallio, Alberici Constructors, "Time Value of Money; Measuring Cost & Reducing Cost", presented in CIV ENG 3RR3, Nov. 7, 2011
2011 – 2012	Greg Hall, Aecon Industrial, "Estimating", presented in CIV ENG 3RR3, Oct. 14, 2011
2011 – 2012	Dr. Carl Haas, University of Waterloo, "Improving Construction Productivity through Development of new tools, materials, and processes", presented in CIV ENG 3RR3, Oct. 2, 2011

Organized Site Visits

- Lincoln Alexander Hall McMaster Residence
  - Facilitated by FRAM+Slokker
  - Co-organized by the Heavy Construction Student Chapter
  - Oct. 22, 2024
- Milton District Hospital
  - Facilitated by PCL Construction
  - Co-organized by the Heavy Construction Student Chapter
  - Sep.30, 2016
- Tunneling Project Randall Reef.
  - Facilitated by McNally Construction
  - Co-organized by the Heavy Construction Student Chapter
  - October 2016
- Bermingham Site (Parish & Heimbecker job site) and plant
  - Facilitated by Bermingham Foundation Solutions Limited
  - Co-organized by the Heavy Construction Student Chapter
  - March 15, 2016
- Heavy Equipment Simulators Lab, Oakville, ON
  - Facilitated by the Operating Engineers Training Institute of Ontario
  - Provided for CIV ENG 4CM4, March 10, 2015
- Union Station Revitalization Project, Toronto, ON
  - Co-organized by the Heavy Construction Student Chapter
  - Provided for CIV ENG 3RR3, Oct. 18, 2014
- West 5th St. Road Sewers and Watermain Reconstruction, Hamilton, ON
  - Facilitated by Mr. Gary Moore and Mr. Jerry Parisotto, City of Hamilton
  - Provided for CIV ENG 3RR3, Sep. 22, 2014
- Beckett Drive Project, the Queen St. Hill, Hamilton, ON
  - Facilitated by Mr. Gary Moore and Mr. Tim Evans, City of Hamilton
  - Provided for CIV ENG 3RR3, Sep. 23, 2013
- McMaster BTech LEED Building, McMaster Main Campus
  - Facilitated by Dr. Tony Cupido
  - Provided for CIV ENG 3RR3, Sep. 28, 2012
- McMaster Psychology building extension, McMaster Main Campus
  - Facilitated by Stewart A. Gould, Project Manager, STF Construction Ltd.
  - Provided for CIV ENG 3RR3, Sep. 25, 2012
- Bridge rehabilitation 403/King st./Main st. bridges in Hamilton, ON
  - Facilitated by Ryan J.B. Farrish, Dufferin Construction Co.
  - Provided for CIV ENG 3RR3, Nov. 17, 2012

Networking Opportunities for Students to Interact and Learn from Professionals

2013 – Present	Co-organized the Annual Heavy Construction Industry Night in collaboration with the Heavy Construction Student Chapter and Engineering Co-op and Career Services
2014 – 2015	Co-organized the Faculty's Heavy Construction and Transportation Mixer, Jan. 26, 2015

Course/Curriculum Development

2023-2024	Developed the new undergraduate-level course CIVENG 4CA4 on "Construction Management and Automation" (Summer and Fall 2023)
2023-2024	Redesigned and refined the existing undergraduate-level course CIVENG 3K03 on "Introduction to Transportation Engineering" to offer for the first time (Summer and Fall 2023)
2022-2023	Developed the new graduate-level course CIVENG 704 on "Computational Intelligence in Transportation and Supply Chain" (Winter 2023)
2011-Present	Developed and constantly refined CIVENG 3RR3 on "Project Management and Engineering Economics".
2011-Present	Developed and have constantly refined CIVENG 4CM4 on "Construction Engineering and Management".

Development/Evaluation of Educational Materials and Programs

2013 – 2015	An Experiential Learning Module on "Telematics in Heavy Construction", designed and coordinated in collaboration with industry partner, Ana-Maria Iliuta, John Deere Foundation, presented in CIVENG 4CM4; offered in 2014 and 2015
2014 – 2015	Collaborated and facilitated a workshop on "Negotiation" Presented by Minha Ha, McMaster University This workshop was incorporated in the CIV ENG 3RR3, Fall 2014
2014 – 2015	Collaborated and facilitated workshop on "Emotional Intelligence" Presented by Minha Ha, McMaster University This workshop was incorporated in the CIV ENG 3RR3, Fall 2014
2013 – 2014	Collaborated and facilitated workshop on "Team Agility" Presented by Minha Ha, McMaster University This workshop was incorporated in the CIV ENG 3RR3, Fall 2013
2013 – 2014	An Experiential Learning Module on "Building Information Modeling (BIM)", designed and coordinated in collaboration with industry partner, Chris Little, Modern Niagara Inc, presented in CIVENG 4CM4; offered in 2014
2012 – 2013	Time-Geography and its Application in Construction, 4-hour module Presented by Dr. Antonio Paez, School of Geography and Earth Sciences, McMaster

Other

2012 – Present	Faculty Advisor to the Heavy Construction Student Chapter
2013 – 2014	Co-established the Heavy Construction Internship Program in collaboration with the McMaster Engineering Co-up and Career Services (ECCS)
2012 – 2013	Established the Heavy Construction Student Chapter

SUPERVISORSHIPS

HQP	Completed		In Progress		Total
	Supervised	Co-supervised	Supervised	Co-Supervised	
PhD	7	2	1	5	15
Master's	2	9	1		12
Undergraduate	33	7			40
Postdoctoral	7		1		8
Total	49	18	3	5	75

Master's

3 sole supervised
9 co-supervised4

Completed (11)

Dates	Student's Name	Project Title	Department/Program
May 2022 –Aug. 2024	Jonathan Sukhu	Comparative Analysis of VANET and Vehicular Cloud Models with Advanced Communications Protocols	Civil Engineering *(Primary Supervisor Co-supervised by Dr. H. Yang)*
Sep. 2021-April 2024	Renuka Mandlik	Speed Prediction for Freight Transport: A Graph Neural Network Approach	Civil Engineering *(primary supervisor with Dr. Susan Tighe as the co-supervisor)*
Sep. 2021- April. 2022 Direct Transfer to PhD in Sep. 2022 (MSc was not completed)	Yunfei Ma	Supply Chain Visibility: Freight Bottlenecks Analysis	Computational Science and Engineering *(co-supervisor with Dr. Elkafi Hassini as the primary supervisor)*
Jan. 2019-Dec.2020	Roxana Rasouli Gandomani	Thesis Title: Costs and Benefits of Shared Mobility in a Suburban Context	Civil Engineering *(I was the primary supervisor in a co-supervision with Dr. Moataz Moahamed)*
Sep. 2018-Aug. 2020	Sean Sears	Thesis Title: Movement of Goods in Canada: A State-of-the-Art Review and a Grounded Theory Investigation of Perceived Barriers	School of Earth, Environment, and Society *(I was the co-supervisor and Dr. Anotonio Paez was the primary supervisor)*
May 2013-Oct. 2014	Wade Genders	Thesis Title: A Microsimulation Approach for Assessing the Impact of Connected Vehicles on Work Zone	Civil Engineering *(Sole supervision)*
Sep. 2012-July. 2014	Simon Minelli	Thesis Title: Effect of Connected Vehicle Technology on Mobility	Civil Engineering

		and Mode Choice Present Position: Project Manager	*(Sole supervision)*
Jan. 2013-Dec. 2014	Kavya Divakarla	Thesis Title: Journey Mapping: A New Approach for Defining Automotive Drive Cycle	Electrical and Computer Engineering *(I was the co-supervisor and Dr. Ali Emadi was the primary supervisor)*
Sep. 2011-Aug. 2013	Wendy Huang	Thesis Title: Integer Programming-Based Approaches for Sustainable Community Applications	Civil Engineering *(I was the co-supervisor and Dr. Brian Baetz was the primary supervisor)*
Sep. 2010-April 2013	Joel Linde	Thesis Title: FRP-Concrete-Steel Composite Column Present Position: Structural Designer	Civil Engineering *(I was the co-supervisor and Dr. Mike Tait was the primary supervisor)*
Sep. 2010-May 2012	Glen Prevost	Thesis Title: Retrofitting Suburban Homes for Resiliency: A Prototype Decision Support System	Civil Engineering *(I was the co-supervisor and Dr. Brian Baetz was the primary supervisor)*

In progress (1)

Dates	**Student's Name**	**Project Title**	**Department/Program**
May 2025 – April 2027	Kwadwo Frimpong	Cooperative planning in distributed transportation and infrastructure projects	Civil Engineering *(Sole supervision)*
Sep. 2024 – Dec. 2025	Jingyi (Jelena) Dong	Agent-based modeling in Construction planning	Civil Engineering *(Sole supervision)* *MEng student with a Research project*

Doctoral
8 sole supervised
7 co-supervised

Completed (9)

Dates	**Student's Name**	**Project Title**	**Department/Program**
May 2021-Dec. 2024	Siyavash Filom	A Learning-Based Optimization Framework for Synchromodal Freight Transport under Uncertainty	Civil Engineering *(Sole supervision)*
July 2023-Dec. 2023	Sina Shaffiee Haghshenas	Collaborative Study Title: AI-based Safety Analysis Using Wearable Sensors	Visiting PhD Student from the University of Calabria *(I was the supervisor during the remote working period and Dr. Giuseppe Guido was the primary supervisor)*

Jan. 2019-Dec. 2022	Hajar (Sahel) Eskandar	Thesis Title: Stress and Workload Detection for Construction Safety	Civil Engineering *(Sole supervision)*
Sep. 2015-Nov.2020	Shuming Du	Thesis Title: Variable Speed Limits Control for Freeway Work Zone with Sensor Faults	Civil Engineering *(Sole supervision)*
Sep. 2014-Nov. 2018	Wade Genders	Thesis Title: Deep Reinforcement Learning Adaptive Traffic Signal Control	Civil Engineering *(Sole supervision)*
Jan. 2015-Dec. 2018	Kavya Divakarla	Thesis Title: A Cognitive Advanced Driver Assistance Systems (ADAS) Architecture for Autonomous-capable Electrified Vehicles	Electrical and Computer Engineering *(I was the co-supervisor and Dr. Ali Emadi was the primary supervisor)*
Sep. 2013-Feb. 2018	June Wang (NSERC Vanier Scholar)	Thesis Title: Situational Awareness for Construction Safety Risks Management	Civil Engineering *(Sole supervision)*
Jan. 2012- Aug. 2016	Nazila Roofigari-Esfahan	Thesis Title: A Framework for Spatiotemporal Uncertainty-Aware Scheduling and Control of Linear Projects	Civil Engineering *(Sole supervision)*
Sep. 2011-July. 2016	Arash Olia	Thesis Title: Modelling and Assessment of Transportation Potential Impact of Connected and Automated Vehicles	Civil Engineering *(Sole supervision)*

In progress (6)

Dates	**Student's Name**	**Project Title**	**Department/Program**
Sep. 2022 – Aug. 2026	Yuhang Gu	ML-based Traffic Queue Length Detection and Proactive Signal Control	Civil Engineering *Primary Supervisor* *(Co-supervised by Dr. Saeid Habibi)*
May. 2022 – Dec. 2025	Yunfei Ma	Data-Driven Emission-Constraint Sustainable Freight Transportation	Computational Science and Engineering – Direct transfer from Master's. *(Co-supervisor with Dr. Elkafi Hassini as the primary supervisor)*
May 2022 – April 2026	Hongting Zhou	Learning-Based Air Cargo Demand Prediction using, Quantitative Data and Unstructured Text	Civil Engineering *(Sole supervision)*
Sep. 2021-Aug. 2025	Jing Li	Machine Learning Enhanced Congestion Prediction: the spatial-temporal impact of traffic incidents under Connected and Automated Environment	Civil Engineering *(co-supervisor with Dr. Hao Yang as the primary supervisor)*
Sep. 2021-Aug. 2025	Ali Ardestani	Prediction of Traffic Congestion with Missing Data: Impact of Non-Recurring Events	Civil Engineering *(co-supervisor with Dr. Hao Yang as the primary supervisor)*

Sep. 2021-Aug. 2025	Renjie Xu	Model-Agnostic Methods to Accelerate Video Analytics Pipelines in Edge Computing	Software Engineering *(co-supervisor with Dr. Rong Zheng as the primary supervisor)*

Post-Doctoral/Fellowship

7 sole supervised

Completed (7)

Dates	**Student's Name**	**Project Title**	**Department/Program**	
July 2024 – Sep 2024	Jessica Achebe (NSERC PDF)	Infrastructure Sustainability and Resilience through Condition Management	Civil Engineering (Sole supervision)	
Dec. 2022-Dec. 2023	Shuming Du	Variable Speed Limit Control for Highway Congestion Management	Civil Engineering (Sole supervision)	
Jan. 2022-Jan. 2024	Harith Abdulsattar	AI-Enhanced Mobility Systems for Estimating, Forecasting and Management of Traffic	Civil Engineering/MITL (Sole supervision)	
Jan. 2020-April 2022	Amir Amiri	Improving the Regional Transportation & Supply Chain Performance	Civil Engineering/MITL (Sole supervision)	
Dec. 2020-June 2021	Shuming Du	Supply Chain Visibility and Performance Measurement	Civil Engineering/MITL *(Sole supervision)*	
March 2018-Aug. 2019	Hany Hassan	Mobility of Older Adults Outside Home	Civil Engineering/MITL *(Sole supervision)*	
April 2011-March 2012	Pedram Izadpanah	Implications of Implementing Connected Vehicles Strategies on Transportation Management	Civil Engineering (Sole supervision)	

In Progress (1)

Dates	**Student's Name**	**Project Title**	**Department/Program**
Jan. 2025-Jan. 2026	Siyavash Filom	Cooperative Logistics Planning	Civil Engineering 27 (Sole supervision)

Upcoming Students (2)

Dates	**Student's Name**	**Project Title**	**Department/Program**
Sep 2025 – Aug. 2027	Yizhuo (Gavin) Chen	Agent-based Modeling of Infrastructure Project Risks	Civil Engineering/ MSc. Admission *In the visa process*
Sep 2025 – August	Homa Behmardi	Multi-agent learning-based	Civil Engineering/ PhD

2029	Kalantari	multimodal freight transport planning	Admission *In the visa process*

Supervisory Committees

Daryush Esmaili, PhD student, Civil Engineering
Hossam El-Din Helal, PhD student, Civil Engineering
Amir Hossein Karbasi, PhD student, Civil Engineering
Abdul Basith Siddiqui, PhD student, Civil Engineering
Behfar Godazgar, PhD student, Civil Engineering
Yu Wu, PhD student, Civil Engineering
Mohammad Halakoo, PhD student, Civil Engineering
Haniyeh Ghomi, PhD student, Civil Engineering
Gamal Eldeeb, PhD student, Civil Engineering
Markimba Williams, Ph.D. student, School of Computational Science and Engineering
Khaled Nasif, PhD student, Civil Engineering
Mostafa ElSayed, PhD student, Civil Engineering

Other

Undergraduate Researchers / Other Professionals (37 Undergrads)

2025 – 2025 Amirhosein Karbasi, Graduate Research Assistant, Multi-agent reinforcement learning model implementation for decentralized synchromodality
2024 – 2025 Megan Coulson, Undergraduate, supervised the Inquiry Course, Inquiry project on "Impact of Autonomous Freight Movement and Delivery on Supply Chain Resilience"
Mar 23 – Dec 23 Dharmik Joshi, part-time graduate Research Assistant, data-driven research and development on congestion prediction and city transportation decision support systems
May 23 – Aug 23 Mazen Hussain, Undergraduate full-time Research Assistant, data-driven smart mobility systems research and development in the collaborative research with Cubic Transportation Inc. (co-supervising with Dr. Mohamed Hussein as the primary supervisor)
Jan 23 – Apr 23 Alina Yingsi Zeng, Undergraduate part-time Research Assistant, data-driven intersection safety systems research and development in the collaborative research with Cubic Transportation Inc.
Sep 22 – Apr 23 Hrithik Patel, Undergraduate part-time Research Assistant, Traffic data pre-processing, Civil Engineering Department.
Sep 22 – Apr 23 Mya Hussain, Undergraduate part-time Researcher, Machine Learning Traffic Analysis and Software integration for the collaborative project with Cubic Transportation, Civil Engineering
May 22 – Aug 22 Anna Hirlehey, Undergraduate Summer Researcher, Research and Development on Transportation Telematics Data Pre-Processing, Civil Engineering Department.
May 22 – Aug 22 Andrew Bronsema, Undergraduate Summer Researcher, Research and Development on Transportation Telematics Data Pre-Processing, Civil Engineering Department.
Jan 22 – Aug 22 Hrithik Patel, Undergraduate Summer Researcher, Research and Development on Transportation Simulation and Modeling, Civil Engineering Department.
May 22 – Aug 22 Mya Hussain, Undergraduate Summer Researcher, Research and Development on Shared Mobility and User Interface Development, Civil Engineering
2017 – 2022 Dr. Mark Ferguson, Senior Research Associate, McMaster Institute for Transportation and Logistics (MITL)
2021 – 2022 Mya Hussain, Undergraduate Researcher, Research and Development on Web Communications & Data Portals for Multimodal Supply chain, McMaster Institute for Transportation and Logistics
2020 - 2020 Sukhbeer Badwal, Undergraduate Summer Research Assistant on "Autonomous Mobility for Goods Movement", McMaster Institute for Transportation and Logistics, Jan. 2020 to April 2020
2019 – 2019 Angelo Pilla, Undergraduate Research Assistant on "Pedestrian Safety for Aging Population",

	McMaster Institute for Transportation and Logistics, Jan 2019-April 2019
2019 – 2019	John Packer, Undergraduate Research Assistant on "Driving Cessation in Aging Population of Ontario", McMaster Institute for Transportation and Logistics, Jan 2019-April 2019
2018 – 2018	Kassandra Byrne, Undergraduate Research Assistant on "Improving Mobility for Older Canadians", McMaster Institute for Transportation and Logistics, Sep. 2018-Dec. 2018
2018 – 2018	Nafeel Farooqui, Undergraduate Research Assistant on "Improving Mobility for Older Canadians", McMaster Institute for Transportation and Logistics, May 2018-Dec. 2018
2016 – 2016	Ilker Hadzhalaran, Undergraduate Summer Research Student, Construction Simulation for Safety Risk Assessment Research, May 2016- Aug. 2016
2015 – 2016	Alana Vandersluis, Undergraduate, Sep. 2015 -March 2016, Inquiry course, Society Inquiry Project on the Impact of Automated Vehicles
2015 – 2016	Paul Cattle, Undergraduate, Sep. 2015-March 2016, Inquiry course, Society Inquiry Project on Construction Waste Management
2015 – 2016	Jedursha Thuraippah, Undergraduate part-time researcher on a project with MTO, Telematics Data Analytics for Vehicles Lane Detection, Oct. 2015-Feb. 2016
2015 – 2016	Akeel Ali, Undergraduate part-time researcher on a project with MTO, Telematics Data Analytics for Vehicles Lane Detection, Oct. 2015-Feb. 2016
2015 – 2016	Justin Hill, Undergraduate part-time researcher on a project with MTO, Telematics Data Analytics for Vehicles Lane Detection, Oct. 2015-Feb. 2016
2015 – 2016	John Cornelio, Undergraduate part-time researcher on a project with MTO, Telematics Data Analytics for Vehicles Lane Detection, Oct. 2015-Feb. 2016
2015 – 2016	Erica Ibrajev, Undergraduate part-time researcher on a project with MTO, Telematics Data Analytics for Vehicles Lane Detection, Oct. 2015-Feb. 2016
2015 – 2016	Brandon Bradt, Undergraduate part-time researcher on a project with MTO, Telematics Data Analytics for Vehicles Lane Detection, Oct. 2015-Feb. 2016
2015 – 2016	Angelo Pilla, Undergraduate part-time researcher on a project with MTO, Telematics Data Analytics for Vehicles Lane Detection, Oct. 2015-Feb. 2016
2015 – 2016	Allister Aresta, Undergraduate part-time researcher on a project with MTO, Telematics Data Analytics for Vehicles Lane Detection, Oct. 2015-Feb. 2016
2015 – 2016	Zeeshan Shahid, Undergraduate part-time researcher on a project with MTO, Telematics Data Analytics for Vehicles Lane Detection, Oct. 2015-Feb. 2016
2015 – 2016	Tashfeen Butt, Undergraduate part-time researcher on a project with MTO, Telematics Data Analytics for Vehicles Lane Detection, Oct. 2015-Feb. 2016
2015 – 2016	JuYoung Kimm, Undergraduate part-time researcher on a project with MTO, Telematics Data Analytics for Vehicles Lane Detection, Oct. 2015-Feb. 2016
2015 – 2015	Ahmad Ali, Pedagogical research assistant, Summer 2015, Pedagogical Research in Construction Management
2015 – 2015	Reiner Schmidt, Part-time research student, summer 2015, Raspberry Pi Application for Construction Resource Tracking
2013 – 2014	Kyle Hasselman, Undergraduate, supervised the Inquiry Course, Inquiry project on Social Implications of Autonomous Vehicles
2013 – 2013	Cesar Gastaldon, Undergraduate summer research student, Connectivity & Data Management in Construction (Lit. Review)
2012 – 2013	Alison Bennett, Undergraduate, supervised the inquiry course, Inquiry Project on Green Logistics
2012 – 2013	Manvir Tatla, Undergraduate co-supervised for the inquiry course, inquiry Project on Sustainable Transportation
2012 – 2012	Wade Gender, Undergraduate summer research student, Developing APIs for simulating V2V communication in PARAMICS
2012 – 2012	Kavya Divakarla, Undergraduate summer research student, 3D bridge modeling using BIM
2012 – 2012	Joseph Van Der Zalm, Undergraduate summer research student
2011 – 2011	Wade Gender, Undergraduate summer research student, Connected Vehicle System: Background and Applications

PhD Comprehensive Committee

2024-2025	Kholoud Kotb, Examiner of the Comprehensive Exam

2024-2025 Mildred Ojirika, Chair of the Comprehensive Exam
2024-2025 Hassan Hamad, Chair of the Comprehensive Exam
2024-2025 Daryush Esmaili, Examiner of the Comprehensive Exam
2023-2024 Amirhossein Kabasi, Examiner of the Comprehensive Exam Part B
2023-2024 Caiying Cheng, Chair of the Comprehensive Exam Part B
2023-2024 Hossam Helal, Examiner of Comprehensive Exam Part B
2023-2024 Ali Shehabeldeen, Chair of the Comprehensive Exam A and B
2022-2023 Abdul Basith Siddiqui, Examiner of the Comprehensive Exam Part A
2022-2023 Behfar Godazgar, Examiner of the Comprehensive Exam Part B
2022-2023 Michelle Ragany, Examiner of the Comprehensive Exam Part A
2022-2023 Yu Wu, Examiner of the Comprehensive Exam Part B
2021-2022 Melina Roshanfar, Chair of the Comprehensive Exam Committee
2021-2022 Mingsai Xu, Examiner of the Comprehensive Exam Part A
2021-2022 Haniyeh Ghomi Rashtabadi, Examiner of the Comprehensive Exam Part B
2021-2022 Tao Xie, PhD student, Chair of the Comprehensive Exam Part B
2020-2021 Abdul Razak Alozi, Examiner of the Comprehensive Exam Part A
2020-2021 Mohammad Halakoo, PhD student, Examiner of the Comprehensive Exam Part A
2020-2021 Tao Xie, PhD student, Chair of the Comprehensive Exam Part A
2020-2021 Haniyeh Ghomi Rashtabadi, Chair of the Comprehensive Exam Part A
2019-2020 Ahmed Abdel Maksoud, PhD student, Chair of the Comprehensive Exam
2019-2020 Kevin McNamara, PhD student, Chair of the Comprehensive Exam
2019-2020 Moamen Galal Elsamrah, PhD student, Chair of the Comprehensive Exam
2019-2020 Manish Patel, PhD student, Chair of the Comprehensive Exam
2019-2020 Yassien Salaheldien, PhD student, Chair of the Comprehensive Exam
2018-2019 Saber Ale Saheb Fosoul, PhD student, Chair of the Comprehensive Exam
2018-2019 Matthew East, PhD student, Chair of the Comprehensive Exam
2017-2018 Pavneet Brar, PhD student, Chair of the Comprehensive Exam
2017-2018 Mohammadreza Najafijozani, PhD student, Chair of the Comprehensive Exam
2017-2018 Feras Sheitt, PhD student, Chair of the Comprehensive Exam
2016-2017 Amit Dar, PhD student, Chair of the Comprehensive Exam
2016-2017 Frezer Awol, PhD student, Chair of the Comprehensive Exam
2014-2015 Ahmed Ismail, PhD student, Examiner, Civil Engineering
2014-2015 Mohamed Ezzeldin, PhD student, Chair of the Comprehensive Exam, Civil Engineering
2014-2015 Mohamed Mokhtar Mohamed, PhD student, Examiner, Civil Engineering
2014-2015 Sina Moallemi, PhD student, Examiner, Civil Engineering
2014-2015 Xing Li, PhD student, Chair of the Comprehensive Exam, Civil Engineering
2013-2014 Ahmed Tawfic, PhD student, Chair of the Comprehensive Exam, Civil Engineering
2013-2014 Brandon Karchewski, PhD student, Examiner, Civil Engineering
2013-2014 Farzad Nikfar, PhD student, Examiner, Civil Engineering

PhD, MASc and MEng Defense Committees

2024 Examiner, Almodather Mohamed, MSc. Student, Civil Engineering, McMaster University
2023 Examiner, Mohammad Halakoo, PhD Candidate, Civil Engineering, McMaster University
2023 Examiner, Xiaoyan Sun, MSc. Student, Civil Engineering, McMaster University
2023 Examiner, Thiago Muzzi, MSc. Student, Civil Engineering, McMaster University
2023 Examiner, Haoya Li, MSc. Student, Civil Engineering, McMaster University
2023 Examiner, Yasmina Monzer, MSc student, Civil Engineering, McMaster University
2023 Examiner, Haniyeh Ghomi, PhD Candidate, Civil Engineering, McMaster University
2022 Examiner, Crystal Ni, PhD Candidate, Civil Engineering, McMaster University
2021 **External Examiner**, Kareem Mostafa Tarek, PhD Candidate, Civil and Environmental Engineering Department, University of Waterloo
2021 **External Examiner**, Chen Chen, PhD Candidate, Building, Civil and Environmental Engineering Department, Concordia University

2021 Examiner, Gamal Eldeeb, PhD Candidate, Civil Engineering, McMaster University
2021 Examiner, Mohamed Khalil MASc student, Civil Engineering, McMaster University
2019 **External Examiner,** Mohammed S. A. Enshassi, PhD Candidate, Civil and Environmental Engineering Department, University of Waterloo
2019 Exam Chair, Xinyi Li, MASc Candidate, Civil Engineering, McMaster University
2018 **External Examine**r, Amin Amini Khafri, PhD Candidate, Civil Engineering Department, University of Alberta
2018 Exam Chair, Bryanna Noade, PhD Candidate, Civil Engineering, McMaster University
2017 Exam Chair, Ala Shaabana, PhD Candidate, Department of Math and Statistics, McMaster University
2014 Examiner, Mostafa ElSayed, PhD candidate, Civil Engineering, McMaster University
2013 Exam Chair, Hilary Barber, MASc student, Civil Engineering, McMaster University
2013 Second Reader, Alexander Vesovic, MEng student, Civil Engineering, McMaster University
2013 Examiner, Khaled Nasif, PhD candidate, Civil Engineering, McMaster University

LIFETIME RESEARCH FUNDING

Ongoing Funding

Name(s) (indicate PI, underline your name)	**Title/Purpose of Research**	**Years of Funding**	**Funding Source/Agency**	**Funding amount** (CAD by year)
Saiedeh Razavi (PI)	*SynchroDelivery: Federated Proactive Planning for Cooperative Project Delivery in Construction*	2025-2030	NSERC Discovery Grant	$55,000/year In Total: $275,000
Saiedeh Razavi (PI)	*Cooperative Planning in Lean Constriction through Ethical, Safe, and Responsible use of AI: A Canada-Japan Collaboration*	2025-2026	McMaster International Initiative Micro Fund	$5000
Moataz Mohamed (PI) Kai Huang (Co-PI) Saiedeh Razavi (Co-PI) Bruce Newbold (Co-PI)	*Reducing the Perceived Risks of Adopting Medium and Heavy Duty Zero Emission Vehicles: A Knowledge Hub for Fleet Decision-makers*	2023-2025	Natural Resources Canada (NRCan)	$87,146 per year In total:$174,292
Saiedeh Razavi (PI)	*Smarter Work Zone: Advancing Situation Management for Work Zone Safety and Mobility*	2018-2025 5 year + 1 year COVID & 1 year DG EC extension	NSERC Discovery Grant	$44,000/year In total: $308,000
Rong Zheng (PI) & Saiedeh Razavi (Co-PI)	*Graduate Student Support for a Multidisciplinary Project on "An AI-based Active System for Pedestrian Safety for Older Adults"*	3 Years 2021-2024	McMaster Faculty of Engineering, Multi-Disciplinary	$9,000/year In total: $27,000
Matthew Roorda, U. of	*City Logistics Solutions for*	4 Years	NSERC Alliance	$999,985/year

Toronto (PI) Elkafi Hassini, McMaster U. Peter Park,York University Merve Bodur ,U. of Toronto Saiedeh Razavi, McMaster U. Birsen Donmez, U. of Toronto Manish Verma, McMaster U. Kevin Gingerich, York U. Marianne Hatzopoulou, U. of T. Mehdi Nourinejad, York U.	*Distribution in the Last-Mile Economy*	2020-2024		In total: $3,999,940
Hao Yang (PI) & Saiedeh Razavi (Co-PI)	*AI-Enhanced Mobility Lab (40% of infrastructure costs)*	2020	Canadian Foundation for Innovation (CFI)-JELF	$102,580
Hao Yang (PI) & Saiedeh Razavi (Co-PI)	*AI-Enhanced Mobility Lab(40% of infrastructure costs)*	2020	Ontario Research Fund (ORF)	$102,580
Saiedeh Razavi (PI)	*Start-up Grant*	2011-Present	Civil Engineering Department Sart-up Grant	$35,000

Funding Completed

Name(s) (indicate PI, underline your name)	**Title/Purpose of Research**	**Years of Funding**	**Funding Source/Agency**	**Funding amount** (by year)
Saiedeh Razavi (PI), Yuanjun Feng, University of Liverpool (Co-PI) Mahnam Saeednia, TU Delft (Co-applicant)	*Enhancing Environmental Sustainability and Resiliency of the Ports*	April 2024-Feb 2025	LIVERPOOL-MCMASTER Global Partnership Fund	$14,757.00
Mahnam Saeednia, TU Delf (PI), Bilge Atasoy, TU Delft (Co-applicant) Saiedeh Razavi (Collaborator) Yuanjun Feng, University of Liverpool (Collaborator)	*Synchromodality for Decarbonization and Logistics Optimization:SYNCO$_2$LOG*	Sep 2024 – Jan 2025	AI Port Catalyzer Fund, TU Delft-Rotterdam AI Port Centre	$23,000 (€17,000)
Saiedeh Razavi (PI) Mahnam Saeednia, TU Delft (Colaborator)	*Green and Resilient Maritime Corridors through Synchromodality and Disruption Management*	2024-2025	McMaster International Initiative Micro Fund	$5000
Saiedeh Razavi (PI) & Hao Yang (Co-PI) & Mohamed Hussein (Co-PI)	*MONILITYCUBE: Smart Mobility Systems*	Oct. 2021-Oct. 2023	Cubic Transportation Systems, Inc.	$450,000 In total: $900,000

Dr. Hao Yang (PI) & Dr. Saiedeh Razavi (Co-PI) & Dr. Harith Abdulsattar (Co-PI)	*Infrastructure-less Hybrid Architecture for CAV Communication for Highway Operational Management*	2022-2023	Ministry of Transportation, Ontario (MTO) – HIIFP Program	$50,000
Saiedeh Razavi (PI)	*Smarter Work Zone: Advancing Situation Management for Work Zone Safety and Mobility*	3 years + 1 year COVID extension 2018-2022	NSERC Discovery Accelerator Supplement (DAS)	$40,000/year In total: $120,000
Saiedeh Razavi (PI) & Mark Ferguson (Co-PI)	*Increasing Supply Chains Resilience: Measuring Strategic Transborder Corridor Fluidity*	Dec. 1 2022-March 31 2023	Transport Canada	$40,000
Saiedeh Razavi (PI) & Mark Ferguson (Co-PI) & Ian Hamilton, Hamilton Port Authority (HOPA) (Co-PI) & Gina Delle Rose-Ash, HOPA (Co-PI)	*Foundational Work on Freight Data Sourcing linked to Hamilton's Airport Employment Growth District*	1 year 2021-2022	Transport Canada	$40,000
Saiedeh Razavi (PI) & Mark Ferguson (Co-PI) & Ian Hamilton, Hamilton Port Authority (HOPA) (Co-PI) & Gina Delle Rose-Ash, HOPA (Co-PI)	*Foundational Study on Cross-Border Short Sea Opportunities*	1 year 2021-2022	Transport Canada	$40,000
Saiedeh Razavi (PI)	*Multimodal Supply Chain Data Analytics*	2020 -2021	Transport Canada	$90,000
David Carter, Innovation Factory (PI); McMaster University Co-PIs: Saiedeh Razavi; Mark Lawford; Saeid Habibi	*Hamilton Urban Mobility (HUM) Centre*	2018-2022	Ontario Center of Excellence (OCE) – Autonomous Vehicle Innovation Network (AVIN) Demonstration Zone and Regional Technology Development Sites	$1,000,000/year In total: $4,000,000
Saiedeh Razavi (PI)	*Multi-Sensor Data Fusion in Support of Port Logistics: Traffic State Estimation*	2020 (Aug.) – 2020 (Dec.)	Transport Canada	$40,000
Saiedeh Razavi (PI)	*Analyzing and Structuring Marine Data Sources to Support HOPA Supply Chain Visibility*	2020 (July) – 2020 (Dec.)	Transport Canada	$40,000
Saiedeh Razavi (PI)	*Advancing Supply Chain and Logistics in the Hamilton-Niagara Region*	2020 (Jan.) – 2020 (Aug.)	Transport Canada	$40,000
Saiedeh Razavi (PI)	*Exploring Goods Movement and Export Diversification for Niagara*	2019 (Sep.) – 2020 (April)	Region of Niagara	$25,000
Ali Emadi (PI);	*The Car of the Future*	2018-2023	NSERC	$1,000,000/year

McMaster U. Co-PIs: Mohamed Bakr; Jennifer Bauman; James Cotton; Saeid Habibi; Mark Lawford; Saiedeh Razavi; Zahra Motamed; Mehdi Narimani; Stephen Veldhuis; Alan Wassyng; Fengjub Yan			Collaborative Research and Development Grants (CRD)	In total: $5,000,000
Antonio Paez (PI); Saiedeh Razavi (Co-PI) Mohamed Hussein (Co-PI) Maryam Ghasemaghaei (Co-PI)	*Examining Traffic Safety Challenges of Older Road Users in Canada*	2 Years 2018-2020	McMaster Research Excellence Award/Faculty of Engineering/Faculty of Science	$21,000/year In total: $42,000
Saiedeh Razavi (PI)	*Strategic Supply Chain Knowledge Development in the Hamilton-Niagara Area*	2018	Transport Canada	$25,000
Saiedeh Razavi (PI); Brenda Vrkljan (Co-PI); Bruce Newbold (Co-PI);	*Maintaining the Mobility of Older Canadians: Examining the Transition from Driving to Driving Cessation*	1 Year 2018-2019	McMaster Institute For Research on Aging (MIRA) - Catalyst Grant	$40,000
Ali Emadi (PI); McMaster U. Co-PIs: Alan Wassyng; Chih-Hung Chen; Fengjun Yan; Gillian Goward; Jacques Carette; James Cotton; Mark Lawford; Mohamed Bakr; Nicola Nicolici; Nigel Schofield; Saeid Habibi; Shahin Sirouspour; Stephen Veldhuis; Saiedeh Razavi; Tom Maibaum;	*Next Generation Affordable Electrified Powertrains with Superior Energy Efficiency and Performance*	5 Years 2013-2018	Natural Sciences and Engineering Research Council of Canada (NSERC) - Automotive Partnership Canada (APC)	$1,785,640/year In total: $8,928,200
Saiedeh Razavi (PI)	*Location Aware Construction*	5 Years + 1 year extension 2012-2017	NSERC Discovery Grant	$29,000/year In total: $174,000
Saiedeh Razavi (PI); & Fortran Traffic Sys. Ltd.	*Advanced Adaptive Signal Control System Using Connected Vehicle Data*	1 Year 2015-2016	Ontario Center of Excellence (OCE) and NSERC VIP1-Engage	$50,000
Saiedeh Razavi (PI); & Tremco Canada	*Unmanned Aerial Vehicle (UAV) for Roofing Inspection – Quality and Scale Assessment*	6 Months 2015-2016	NSERC Engage	$25,000
Saiedeh Razavi (PI)	*Data Analytics for Telematics Lane by Lane Testing*	9 Months 2015-2016	Ministry of Transportation of Ontario (MTO)	$84,000
Saiedeh Razavi (PI); & Dufferin Construction Co.	*Smart Phone Construction Site Safety Awareness System*	6 Months 2014-2015	NSERC Engage	$25,000
Saiedeh Razavi (Co-PI);	*High-Performance*	2 Years	Research	$9,000/year

& Baher Abdulhai, U. of Toronto (PI)	*Optimization of Integrated Transportation Management Methods for Emergency Evaluation*	2013-2015	Collaboration Agreement with UofT	In total: $18,000
Saiedeh Razavi (PI)	*Implications of Implementing Connected Vehicles Strategies on Transportation Management*	1 year 2011-2012	Ministry of Transportation of Ontario (MTO)	$115,000/year
Saiedeh Razavi (PI)	*Graduate Student Support for New Faculty Members*	2 years 2011-2013	Civil Engineering Department, McMaster University, Graduate Student Support	$19,000/year In total: $38,000

Funding Applied for

Name(s) (indicate PI, underline your name)	**Title/Purpose of Research**	**Years of Funding**	**Funding Source/Agency**	**Funding amount** (by year)
Geert van Kollenburg (PI); Co-Applicants: Alessandro Chiumento; Alessia Napoleone; Anna Wilbik; Ifigeneia Mavridou; Irina Nikolova; Jeroen Linssen; Joël Karel,; Jurjen Helmus; Mahnam Saeednia; Marjolein Caniëls; Paul Grefen; Renato Calzone,; Reza Sabzevari; Rico Möckel; Troy Nachtigall; Wico Mulder; Yingqian Zhang; Zaharah Bukhsh; & Saiedeh Razavi (Collaborator)	*SYMBIOSIS: SYnergizing Machines and Brains for Intelligent Operations in Smart Industry 5.0 Systems*	2025-2032	Netherlands Organisation for Scientific Research (NWO): NWA-ORC Research along routes by consortia	$1,402,417/ year In Total: $9,816,920 (€ 6,741,000)
Hao Yang (PI) Saiedeh Razavi (Co-PI) Cancan Yang (Co-Applicant)	*Improving Canadian Highway Bridge Mobility and Safety through Truck Platoons enabled by Connected and Autonomous Vehicles*	2025-2027	New Frontiers in Research Fund(NFRF) - Exploration	125,000 Not Awaraded
Hao Yang (PI) Saiedeh Razavi (Co-PI) Harith Abdulsattar (Co-I)	*AI-Enhanced Traffic Safety System: Real-Time Highway Safety Scoring System Using Probe Vehicle Data*	2024	MTO, Road Safety Research Partnership Program (RSRPP)	$49,354 Not Awarded
Ali Emadi (PI) et al. Emadi, Ali (PI), Ahmed, Ryan (Co-PI), Yates, Charlotte (Co-PI), Sekuler, Allison (Co-PI), Vrkljan, Brenda (Co-PI), Bayat, Sayeh (Co-PI), Emerson, Claudia	*Driving Change: Navigating the Intersection of Smart Mobility, Well-Being, and Artificial Intelligence*	2025-2031	New Frontiers in Research Fund (NFRF)	$4,000,000 Not Awarded

(Co-PI), Mahyar, Hamidreza (Co-Applicant), Keshavarz Motamed, Zahra (Co-Applicant), Habibi, Saeid (Co-Applicant), Ghasemaghaei, Maryam (Co-Applicant), Razavi, Saiedeh (Co-Applicant), Lawford, Mark (Co-Applicant), Treviranus, Jutta (Co-Applicant), Skorburg, Joshua (Co-Applicant)				
Saiedeh Razavi (PI) & Hao Yang (Co-PI) & Mohamed Hussein (Co-PI) & Moataz Mohamed (Co-PI) & Zoe Li (Collaborator) & Kai Huang (Collaborator)	*Cognitive Transportation for Connected Communities*	2023-2027	NSERC Alliance	$3,120,000 total ($624,000 per year) (not awarded)
Ali Emadi (PI) Saeid Habibi (Co-PI)& Mark Lawford (Co-PI)& Stephen Veldhuis (Co-PI)& Saiedeh Razavi (Co-PI)& Babak Nahid-Mobarakeh (Co-PI)& Berker Bilgin (Co-PI)& James Cotton (Co-PI)& No(Co-PI)	*Next-Generation Electrified Vehicle Powertrain Testing Facility with NVH Capabilities*	2023	Canadian Foundation for Innovation (CFI)-Innovation Fund	$9,800,000 total (not awarded)
Saiedeh Razavi (PI) & Mark Ferguson (co-PI)	*A digital hub for integrated infrastructure planning in Southern Golden Horseshoe Communities*	2022-2023	Infrastructure Canada - Research and Knowledge Initiative (RKI)	$215,000/year ($430,000 total) (submitted in 2021, not awarded)
Saiedeh Razavi (PI); David Harris Smith (Co-PI); Clifton Van Der Linden (Co-PI); Hao Yang (Co-PI).	*How Will Older Adults Respond to New Ways of Accessing Goods and Services? An Investigation Using Virtual Environments and Advanced Survey Methodologies*	1 year 2021-2022	The Labarge Centre for Mobility in Aging within the McMaster Institute for Research on Aging	$40,000 (submitted in 2021, not awarded)
Hao Yang (PI) & Saiedeh Razavi (Co-PI) & Brenda Vrkljan (Co-PI) & Bruce Newbold (Co-PI).	*Understanding behaviors of high-risk older drivers and improving their driving safety with advanced driver assistant systems*	1 year 2021-2022	The Labarge Centre for Mobility in Aging within the McMaster Institute for Research on Aging	$40,000 (submitted in 2021, not awarded)
Amir Amiri (PI) & Saiedeh Razavi (Co-PI) & Brenda Vrkljan (Co-PI) & Mark Ferguson (Co-PI)	*Readiness for an Aging Population: Community-by-Community Scoring of the Greater Golden Horseshoe Region*	1 year 2021-2022	MIRA Postdoctoral Fellowships in Aging Research & Labarge Postdoctoral Fellowship in	$50,000 (submitted in 2021, not awarded)

			Mobility in Aging	
Hao Yang (PI & PM) Saiedeh Razavi (Co-PI & Co-PM) Rong Zheng (Co-PI) Mohamed Hussein (Co-PI) Wenbo He (Co-PI)	*Collision-Free Intersection with Connected and Autonomous Vehicles: from System Development to Field Experiment*	2 Years 2021-2023	Transport Canada, Enhanced Road Safety Transfer Payment Program	$87,337/year (submitted in 2021, not awarded)
John McGill, Wood. Inc. (PI) Deloitte CIMA Canada Inc. (CIMA+) Saiedeh Razavi, MITL Dillon Consulting LURA UrbanTrans North America	*Advancing Transportation in Ontario (ATO+)*	2 Years 2021-2023	Ministry of Transportation of Ontario, The Southwestern Ontario Transportation Planning Study	$1,218,038/year (submitted in 2020, not awarded)

LIFETIME PUBLICATIONS

Number of Citations H-Index (All) i10-index (All)	5283 (Google Scholar Citation Report, Nov. 24, 2024) 27 46
Peer-reviewed publications	3 Book chapters 56 Published or Accepted Journal Papers 7 Under Review Journal papers 84 Conference papers 3 Theses
Non peer-reviewed publications	3 Published Journal Papers 16 Knowledge Mobilization/Community Engagement/Technical Reports 25 Media Coverages

Peer Reviewed

Contribution to Books

1. **Eskandar, S., Wang, J.,** & Razavi, S. **(PI)**. (2020). Human-in-the-Loop Cyber-Physical Systems for Construction Safety. In Cyber-Physical Systems in the Built Environment (pp. 161-173). Springer, Cham.
2. **Roofigari-Esfahan, N**., & Razavi, S. **(PI)**. (2020). CPS-Based Approach to Improve Management of Heavy Construction Projects. In Cyber-Physical Systems in the Built Environment (pp. 89-105). Springer, Cham.
3. Robinson Fayek, A., Rankin J.H., Razavi, S., Thomas, R.T., (2013). Canada – Innovation through Collaboration, Book Chapter, International R&D Investment and Impact in Construction, Taylor & Francis

Journal Articles Submitted for Publication

1. **Zhou, H.,** Razavi, S. (PI)., "Fusing Unstructured Text and Time Series Demand and Economic Data for Demand Prediction in Air Cargo Transportation", submitted to *the journal of Data Science for Transportation,* Dec. 2024
2. **Filom, S.,** Dewantara, MS., Saeednia, M., Razavi, S. (PI)., "A Modeling Framework for Enhancing Resilience in Synchromodal Freight Transportation Using Delay Buffer and (De)Consolidation Strategies", Under Review at the *Transportation Research Part E: Logistics and Transportation Review,* submitted on Nov. 25, 2024, (Submission ID: TRE-D-24-03186).
3. Dewantara, MS., **Filom, S.,** Razavi, S., Atasoy, B., Zhang, Y., Saeednia, M., "Resilient Synchromodal Transport through Learning Assisted Hybrid Simulation Optimization", Under Review at the *Transportation Research Part C: Emerging Technologies,* submitted on Dec. 26, 2024, (Submission ID: TRC-24-02654).
4. **Zhou, H.,** Razavi, S., "Unlocking Air Cargo Demand: A Novel Data Characteristic-Based Predictive Framework", Submitted to *the Journal of Expert Systems with Application.*
5. **Sukhu, J.,** Yang, H., **Abdulsattar, H**., Razavi, S., "Improving Freeway Network Mobility: A Comparative Study of Vehicle Cloudification and VANET Architectures", Under Review at the *IEEE Transactions on Vehicular Technology*., (Submission ID: VT-2024-03209).
6. **Sukhu, J**., Yang, H., **Abdulsattar, H**., Razavi, S., Karbasi, A. "Freeway Traffic Management: An Assessment of VANET Performance during Infrastructure Failure", Under Review at *IET Intelligent Transport Systems*, (Submission ID: ITS-2024-08-0259)
7. **Eskandar, S**., Razavi, S. (PI)., "Toward Occupational Stress Detection: Anomaly Detection Using Unsupervised Deep Learning", accepted, (Submission ID: 226208565.R2)

Journal Articles Published

1. **Gu, Y.,** Razavi, S. (PI). Yang. H., "Headway Anomaly Detection for Cycle Maximum Queue Length Estimation: A Comparative Study", under review at the *Journal of Transportation Research Record*, In Press.
2. **Li, J.**, Yang, H., Razavi, S., **Abdulsattar, H**. (2025). *"*Highway Non-Recurrent Congestion Prediction Using A Multi-Step Spatio-Temporal Deep Learning Approach*", Transportation Letters: The International Journal of Transportation Research. https://doi.org/10.1155/atr/9941856.*
3. **Filom, S.,** Razavi, S. (PI)., (2025). "A Learning-Based Robust Optimization Framework for Synchromodal Freight Transportation Under Uncertainty", *Transportation Research Part E: Logistics and Transportation Review.* 199, 103967, https://doi.org/10.1016/j.tre.2025.103967
4. **Ardestani, A.,** Yang, H., Razavi, S., (2025), "Enhancing Traffic Speed Prediction Accuracy: The Multi-Algorithmic Ensemble Model with Spatiotemporal Feature Engineering", In Press, *the Journal of Advanced Transportation*, http://dx.doi.org/10.1155/atr/9941856
5. **Li, J.;** Yang, H.; Razavi, S., (2024). "Predicting Freeway Non-recurring Congestion via a Spatio-Temporal Deep Learning Approach", *Transportmetrica A: Transport Science.* 1–29. https://doi.org/10.1080/23249935.2024.2438314
6. **Gu, Y.,** Habibi, S., Razavi, S. (PI)., (2024). "Cycle Maximum Queue Length Estimation: An Integrated Deep Learning and Adaptive Neuro-Fuzzy Inference System Framework", *IEEE Access*, 12, 166564-166587, https://doi.org/10.1109/ACCESS.2024.3493753
7. **Ma, Y.,** Liu, C.A., Hassini, E., Razavi, S., (2024). "A Network-Based, Data-Driven Methodology for Identifying and Ranking Freight Bottlenecks", the Journal of *Data Science for Transportation,* 6, 20, https://doi.org/10.1007/s42421-024-00107-z
8. **Filom, S.**, Razavi, S. (PI). (2023). "Decarbonization through Modal Shift using a Synchromodal Platform: A Case Study in the Great Lakes", the *Journal of Supply Chain Management Science,* 4(3-4), 97–113. https://doi.org/10.59490/jscms.2023.7145
9. **Xu., R.,** Razavi, S., Zheng, R. (2023). "Edge Video Analytics: A Survey on Applications, Systems and Enabling Techniques", *IEEE Communications Surveys and Tutorials,* 25(4), 2951 - 2982. 10.1109/COMST.2023.3323091
10. **Ma, Y., Amiri, A.,** Hassini, E., Razavi, S. (Co-PI), (2022). "Transportation Data Visualization with a Focus on Freight: A Literature Review", *Journal of Transportation Planning and Technology,* 45(4), 358-401. https://doi.org/10.1080/03081060.2022.2111430

11. **Filom, S., Amiri, A.,** Razavi, S. (PI). (2022). "Applications of Machine Learning Methods in Port Operations – A Systematic Literature Review", *Journal of Transportation Research Part E: Logistics and Transportation Review*, 161, 102722 . (Impact Factor 2021-22: 7.925)
12. **Rasouli, R.,** Mohamed, M., **Amiri, A.,** Razavi, S. (Co-PI). (2022). "System Optimization of Shared Mobility in Suburban Contexts", *Journal of Sustainability*, 14(2), 876. https://doi.org/10.3390/su14020876. (Impact Factor: 3.473)
13. **Sears S**., Mohamed, M., **Ferguson, M**., Razavi, S., Paez, A., (2022). "Perceived Barriers to the Movement of Goods in Canada: A Grounded Theory Investigation", *Journal of Transportation Research Part A: Policy and Practice,* 162, 27-45, (Impact Factor 2020-21: 4.43)
14. **Hassan, H.**, Lauzon, M., **Ferguson, M**., Newbold, B., Vrkljan, B., Razavi, S. (PI). (2022). "Factors affecting older adults' satisfaction with their mobility options: A survey-based analysis" *Journal of Transportation Research Record***,** 2676(5), 315–324, https://doi.org/10.1177/03611981211065739
15. **Du S**., and Razavi S. (PI). (2021). "Fault-tolerant control of variable speed limits for freeway work zone with recurrent sensor faults" *IEEE Transactions on Intelligent Transportation Systems*, 23(8), 10815 - 10826, DOI: 10.1109/TITS.2021.3095945. (Impact Factor 2020-21: 6.319)
16. **Hassan, H**., Byrne, K, **Ferguson, M.,** Vrkljan, B., Newbold, B., Razavi, S. (PI). (2021). "Older Adults and their Willingness to Use Semi and Fully Autonomous Vehicles: A Structural Equation Analysis", Journal of Transport Geography, 95, 103133, DOI:10.1016/j.jtrangeo.2021.103133. (Impact Factor 2020-21: 4:00)
17. Doulabi, S., **Hassan, H., Ferguson, M**., Razavi, S. (Co-PI)., Paez, A., (2021). "Exploring the determinants of older adults' susceptibility to pedestrians' incidents", *Journal of Accident Analysis and Prevention,* 155, 106100 https://doi.org/10.1016/j.aap.2021.106100 (Impact Factor 2021-22: 4.993)
18. **Amir A**., **Ferguson M**., Razavi, S. (PI). (2021). "Adoption Patterns of Autonomous Technologies in Logistics: Evidence for Niagara Region", *Transportation Letters: the International Journal of Transportation Research, (*14)7: 685-696. (Impact Factor: 3.598)
19. **Du, S.** Razavi, S. (PI). (2020). "Fault-Tolerant Variable Speed Limit Control for Freeway Work Zone", *Journal Advanced Engineering Informatics,* 45, 101133. (Impact Factor =5.603)
20. Paez, A., **Hassan, H**., Ferguson, A., Razavi, S. (Co-PI)., (2020)."A systematic assessment of the use of opponent variables, data subsetting and hierarchical specification in two-party crash severity analysis", *Journal of Accident Analysis and Prevention,* 144, 105666 (Impact Factor 2020-21=3.58)
21. **Genders, W.,** Razavi, S. (PI). (2020). "Policy Analysis of Reinforcement Learning Adaptive Traffic Signal Control", *ASCE Journal of Computing in Civil Engineering* 34(1), 04019046. *(*Impact Factor =5.44)
22. **Divakarla, K.P**., Emadi, A., Razavi, S., Habibi, S., and Yan, F., (2019). "A Review of Autonomous Vehicle Technology Landscape", *International Journal of Electric and Hybrid Vehicles (IJEHV).* 1(4), 320-345.
23. **Genders, W.,** Razavi, S. (PI)., (2019). "Evaluating Reinforcement Learning State Representations for Adaptive Traffic Signal Control", *Journal of Traffic and Transportation Management (JTTM*), 1(1), 19-26.
24. **Hassan, H**., Ferguson, M., Razavi, S. (PI)., Vrkljan B. (2019). "Factors that influence Older Canadians' Preferences for using Autonomous Vehicle Technology: A Structural Equation Analysis", *Journal of Transportation Research Record,* 2673(1), 469–480.
25. **Du, S.,** Razavi, S. (PI)., (2019). 'Variable Speed Limit for Freeway Work Zone with Capacity Drop Using Discrete-time Sliding Mode Control", *ASCE Journal of Computing in Civil Engineering,* 33(2), 04019001. (IF =3.46)
26. **Genders, W.,** Razavi, S. (PI). (2019). "Asynchronous n-Step Q-learning Adaptive Traffic Signal Control", *Journal of Intelligent Transportation Systems Technology, Planning, and Operations*, 23(4) 319-331 (Impact Factor=3.269).
27. **Wang, J.,** Razavi, S. (PI). (2019). "Integrated and Automated Systems for Safe Construction Sites", *ASCE Journal of Professional Safety,* 64(2), 41–45.
28. **Divakarla, K.,** Wirasingha, S., Emadi, A., Razavi, S. (2019) "Artificial Neural Network Based Adaptive Control for Plug-in Hybrid Electric Vehicles", *International Journal of Electric and Hybrid Vehicles (IJEHV).* 11(2):127
29. **Divakarla, K.,** Emadi, A., Razavi, S. (Co-PI). (2018). "A Cognitive Advanced Driver Assistance Systems (ADAS) Architecture for Autonomous-capable Electrified Vehicles", *IEEE Transactions on Transportation Electrification.* 5(1), 48-58. *(*Impact Factor 2020-21=5.444)

30. **Wang, J.,** & Razavi, S. **(PI).** (2018). "Spatiotemporal Network-based Model for Dynamic Risk Analysis on Struck-by-equipment Hazard", *ASCE Journal of Computing in Civil Engineering*, 32(2), 04017089. (IF =3.46).
31. **Olia, A.,** Razavi, S. **(PI).**, Abdulhai, B., & Abdelgawad, H. (2018). "Traffic capacity implications of automated vehicles mixed with regular vehicles", *Journal of Intelligent Transportation Systems*, 22(3), 244-262 (Impact Factor=3.269).
32. **Olia, A.,** Abdelgawad, H., Abdulhai, B., Razavi, S. **(PI).**, (2017). "Optimizing Numbers and Locations of Freeway Roadside Equipment (RSE) in Connected Vehicle Environments for Travel Time Estimation." *Connected and Automated Vehicle Systems Special Issue; Journal of Intelligent Transportation Systems: Technology, Planning, and Operations*, 21(4), 296-309 (Impact Factor=3.269).
33. **Divakarla, K.,** Emadi, A., Razavi, S. **(Co-PI).**, (2017). "Journey Mapping", Re-defined Drive Cycle: an Accurate Vehicle Performance Prediction Tool", *International Journal of Electric and Hybrid Vehicles*, 9(2),169 - 186.
34. **Roofigari-Esfahan, N.** and Razavi, S. **(PI).** (2017) "Uncertainty-Aware Linear Schedule Optimization: A Space-Time Constraint-Satisfaction Approach", *ASCE Journal of Construction Engineering and Management*, 143(5).
35. **Huang, W.,** Razavi, S., Baetz, B.W., (2016). "A GIS-Based Integer Programming Approach for the Location of Solid Waste Collection Depots.", *the Journal of Environmental Informatics,* 28(1), 39-44.
36. **Wang, J.,** Razavi, S. **(PI).** (2016). "Two 4D Models for Struck-by-Equipment Hazard Prevention with Reduced False Alarms", the *ASCE Journal of Computing in Civil Engineering*, 30(60). (IF =3.46)
37. **Divakarla, K.,** Emadi, A., Razavi, S. **(Co-PI).** (2016). "Journey Mapping – A New Approach for Defining Automotive Drive Cycles", *IEEE-IAS IEEE Transactions on Industry Application*, 52(6), 5121-5129**.**
38. **Genders, W.**, Razavi, S. **(PI).**, (2016). "Impact of Connected Vehicle on Work Zone Network Safety through Dynamic Route Guidance," *ASCE Journal of Computing in Civil Engineering*, 30(2).
39. **Wang, J**., Razavi, S. **(PI).**, (2016). "A Low False Alarm Rate Model for Unsafe Proximity Detection in Construction" the *ASCE Journal of Computing in Civil Engineering*, 30(2).
40. **Olia, A**., Abdelgawad, H., Abdulhai, B., Razavi, S. **(PI).** (2016). "Assessing the Potential Impacts of Connected Vehicles: Mobility, Environmental, and Safety Perspectives", Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 20(3), 229-243.
41. **Minelli, S**., **Izadpanah, P**., Razavi, S. **(PI).** (2015). "Evaluation of the Impact of Connected Vehicle on Mobility and Mode Choice", *Journal of Traffic and Transportation Engineering*, 2(5), 301-312.
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44. **Linde, J**., Tait, M., El Dakhakhni, W., Razavi, S., (2015). "FRP Confined Concrete Composite Retrofit System for Structural Steel Columns", the *ASCE Journal of Composites for Construction.* 19(5), 04014086.
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47. **Huang, W**., Dai, L.M., Baetz, B.W., Cao, M.F., Razavi, S., (2013). "Interval Binary Programming Model for Noise Control within an Urban Environment", Journal of Environmental Informatics, 21(2), 93-101.
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Other (including proceedings at meetings)

1. **Ma, Y;** Hassini, E; Razavi, S. (2025). "Evaluating the Impact of Higher-Order Transit Infrastructure on Freight Movement: A Telematics Approach", Poster, *the Transportation Research Symposium 2025*, Rotterdam, The Netherlands, May 2025
2. **Ma, Y;** Hassini, E; Razavi, S. (2025). "A Data-Driven Approach to Eco-Routing for Freight Trucks: Time-Dependent Path Analysis and Emission Optimization", *Transportation Research Board (TRB) 104th Annual Meeting*, Washington D.C., US, January 2025
3. **Ardestani, A**; Yang, H; Razavi, S. (2025). "Enhanced Traffic Speed Prediction During Social Events using EA-LSTM and Probe Vehicle Data.", *Transportation Research Board (TRB) 104th Annual Meeting*, Washington D.C., US, January 2025
4. **Zhou, H**; Razavi, S. (2025). "A Novel Air Cargo Demand Prediction Model Based on Feature Fusion of Time Series and Unstructured Textual Data", *Transportation Research Board (TRB) 104th Annual Meeting*, Washington D.C., US, January 2025
5. **Filom, S.,** Razavi, S., (2024). "Advancing Travel Time Prediction in Intelligent Transportation Systems Through Leaning-Based Uncertainty Quantification", *2024 IEEE International Conference on Smart Mobility (SM),* 16-18 Sep., Niagara Falls, Canada, 165-170, doi: 10.1109/SM63044.2024.10733522
6. Dewantara, MS., Atasoy, B., Razavi, S. Saeednia, M., (2024). "Learning Assisted Simulation-Optimization Framework for Resilient Freight Transport Corridors". *2024 IEEE International Conference on Smart Mobility (SM),* 16-18 Sep., Niagara Falls, Canada.
7. Saeednia, M., Razavi, S., Atasoy, B., **Filom, S**., Dewantara, MS., (2024)."A Simulation-Based Optimization Framework for Adaptive Disruption Management Strategies in Synchromodal Transport", 33rd European Conference on Operational Research, June 30-July 3, 2024, Copenhagen, Denmark.
8. **Sukhu, J.,** Yang, H., **Abdulsattar, H**., Razavi, S., Ucar, S., Farid, Y., (2024). "A Comparative Study of Stationary and Dynamic Vehicular Micro Clouds: A Case of Vehicle Platooning for Incident Management", the *IEEE Vehicular Technology Conference (IEEE VTC)*, 7-10 October, Washington D.C.
9. **Sukhu, J.** Yang, H., **Abdulsattar, H**., Razavi, S., (2024). "Truck Platooning Management: A Comparison of Vehicle Cloudification versus Infrastructure-less Communication Systems", *Intelligent Transportation Systems Canada Conference*, June 19-21, Vancouver, Canada.
10. **Ma, Y.,** Hassini, E., Razavi, S., (2024). "Data-Driven Analysis of Sustainable Truck Routing: Tradeoffs Between Efficiency and Emissions", Abstract and presentation at the *Transportation Association of Canada Conference (TAC 2024)*, Vancouver, Canada.
11. **Du, S.,** Razavi, S., **Abdulsattar, H.,** (2024). "Variable Speed Limits Control for Smart Work Zone with Connected Vehicles", the 41st *International Symposium on Automation and Robotics in Construction (ISARC 2024),* June 2024, Lille, France
12. **Li, J.** Yang, H., Razavi, S., (2024). "Non-Recurring Congestion Forecasting: Enhanced Multi-step Spatio-temporal Prediction with Interpretability and Comprehensive Crash Data", the 59th CTRF Conference, Kelowna, British Columbia, May 2024, Kelowna, BC, Canada

13. **Ardestani, A**., Yang, H., Razavi, S., Zhang, Z., (2024). "Enhancing Traffic Flow Prediction: Integrating Neural Temporal Relational Network (NTRN) with Missing Data Imputation", the 59th CTRF Conference, Kelowna, British Columbia, May 2024, Kelowna, BC, Canada
14. **Ma, Y**., Hassini, E., Razavi, S., (2024). "A Framework for Emission Analysis of Transportation Infrastructure: A Data-Driven Approach with a Freight Movement Case Study", the 59th CTRF Conference, May 2024, Kelowna, BC, Canada
15. **Gu, Y.,** Razavi, S., (2024). "Cycle Queue Length Estimation at Signalized Intersections: A Learning-Driven Approach", the 59th CTRF Conference, May 2024, Kelowna, BC, Canada
16. **Zhou, H.,** Razavi, S., (2024). "Air Freight Demand Forecasting using CNN- LSTM Model", the 59th CTRF Conference, May 2024, Kelowna, BC, Canada
17. **Zhou, H., Ma, Y.,** Razavi, S. (2024). "Exploring the Rise of Large Language Models (LLMs) in Supply Chain, Logistics, and Transportation: A Multi-faceted Approach", *ITE Canada 2024 Annual Conference,* June 2024, Hamilton, Canada
18. **Sukhu, J.** Yang, H., **Abdulsattar, H**., Razavi, S., (2024). "Connected and Autonomous Vehicle Networks: A Comparative Analysis of Vehicular Cloudification and Ad-Hoc Approaches for Freeway Mobility Management", *the Canadian Society for Civil Engineering (CSCE) 2024 Annual Conference*, Niagara Falls, Canada.
19. **Mandlik, R.,** Razavi, S., Tighe, S., (2024). "Advancing Traffic Speed Prediction in Intelligent Transportation Systems: A Multi-Head Attention for Spatial-Temporal Graph Neural Network Approach", *the Canadian Society for Civil Engineering (CSCE) 2024 Annual Conference*, Niagara Falls, Canada.
20. **Zhou, H., R**azavi, S., (2024). "Enhancing Air Cargo Demand Forecasting Using Quantitative Data and the Long Short-Term Memory (LSTM)", *the Canadian Society for Civil Engineering (CSCE) 2024 Annual Conference*, Niagara Falls, Canada.
21. **Ma, Y**., Hassini, E., Razavi, S., (2024). "A Data-driven Methodology for Identifying and Ranking Freight Bottlenecks", a poster presentation at the 2024 *Transportation Research Board (TRB) Annual Meeting,* Washington D.C., US.
22. **Li, J.**, Yang, H., Razavi, S., **Abdulsattar, H**., Zhang, Z., (2024) "Advancing Non-Recurring Congestion Forecasting: A Novel Approach for Robust Multi-Step Spatio-Temporal Prediction", a poster presentation at the 2024 Transportation Research Board (TRB) Annual Meeting, Washington D.C., US.
23. Karbasi, A.H., Yang., H., Razavi, S., (2024). "Exploring the Impact of Traffic Signal Control and Connected and Automated Vehicles on Intersections Safety: A Deep Reinforcement Learning Approach", a poster presentation at *the 2024 Transportation Research Board (TRB) Annual Meeting,* Washington D.C., US.
24. **Sukhu, J.** Yang, H., **Abdulsattar, H**., Razavi, S., (2023). "Assessment of the Impact of Network Infrastructure Failure on Infrastructure-supported vs. Infrastructure-less V2X Systems", *the proceeding of the IEEE 26th International Conference on Intelligent Transportation Systems (ITSC),* Sep. 2023, Bilbao, Spain.
25. **Filom, S.,** Razavi, S., (2023). "Application of Web3 and Blockchain Technology in Physical Internet-Based Synchromodal Freight Transportation", Poster presentation at the 9th International Physical Internet Conference, June 2023, Athens, Greece.
26. **Mandlik, R.,** Tighe, S., Razavi, S**.** (2023). "Graph Neural Networks for Freight Transportation and Logistics Applications: A Comprehensive Review", the proceeding of the *Canadian Transportation Research Forum Annual Conference (CTRF*), May 2023, Toronto.
27. **Filom, S.,** Razavi, S., (2023). "An LSTM deep learning framework for port demand prediction in Ontario ports" , the proceeding of the *Canadian Transportation Research Forum Annual Conference (CTRF*), May, 2023, Toronto.
28. **Filom, S.,** Razavi, S., (2023). "Opportunities for Synchromodal Freight Transportation for US-Canada Transborder Trade in Great Lakes: Conceptualization and Descriptive Analysis", the proceeding of the *Transportation Research Board (TRB)* 2023 *Annual Meeting*, Jan. 2023.
29. **Rasouli, R.,** Mohamed, M., Razavi, S., (2021). "Costs and Benefits of Shared Mobility in a Suburban Context: The Impact of Powertrain Technology", *Canadian Transportation Research Forum Annual Conference (CTRF)*, May 2021, Online.
30. **Hassan, H.**, Lauzon, M.R., Ferguson, M., Newbold, B., Vrkljan, B., Razavi, S. (2021) "Factors affecting older adults' satisfaction with their mobility options: A survey-based analysis" Presentation at the *Transportation Research Board (TRB)* 2021 *Annual Meeting*, Jan. 2021, Online.

31. **Eskandar, S.,** Razavi, S., (2020). "Using Deep Learning for Assessment of Workers' Stress and Overload", the 37th International Symposium on Automation and Robotics in Construction (ISARC 2020), Oct. 2020, Online.
32. **Hassan, H.**, Byrne, K., Ferguson, M., Vrkljan, B., Newbold, B., Razavi, S., (2020). "Older Canadians' Preferences, Challenges and Concerns to Use Current and Emerging Transportation Alternatives", Presentation at the *Transportation Research Board (TRB)* 2020 *Annual Meeting*, Washington. DC. , January 2020
33. **Wang, J**., Razavi, S., (2019). "Network-based Safety Leading Indicators for Safety Risk Analysis in Construction", *the 63rd Human Factors and Ergonomics Society (HFES) International Annual Meeting,* Oct. 28th-Nov. 1st, 2019, Seattle, Washington.
34. **Du, S**, Razavi, S., (2019). "Fault-Tolerant Variable Speed Limit Control for Freeway Work Zone", the *26th International Workshop on Intelligent Computing in Engineering* (Eg-ICE 2019), June 30 – July 03, 2019, Louven, Belgium.
35. **Eskandar, S., Wang, J.,** Razavi, S., (2019)."A Review of Social, Physiological, and Cognitive Factors Affecting Construction Safety", the 36th International Symposium on Automation and Robotics in Construction (ISARC 2019), May 21-24, 2019, Banff, Alberta.
36. **Du, S.**, Razavi, S., (2019). "Freeway Work Zone Traffic State Estimation with Fault Diagnosis", 2019 European Conference on Computing in Construction, July 10-12, 2019, Chania, Greece.
37. **Hassan, H**., Faroogui, N., Ferguson, M., Razavi, S. (2019). "Examining Contributing Factors to Motorcycle Crashes using Matched Case-Control Logistic Regression", Presentation at the *2019 TRB Annual Meeting*, Washington. DC.
38. **Hassan, H**., Ferguson, M., Razavi, S., Vrkljan B. (2018). "Factors that influence Older Canadians' Preferences for using Autonomous Vehicle Technology: A Structural Equation Analysis", Presentation at the *2019 TRB Annual Meeting, Washington, DC.*
39. Hamilton, R., Seager, H., **Divakarla, K.,** Emadi, A., Razavi, S. **(2018).** "Modeling and Simulation of an Autonomous-capable Electrified Vehicle: A Review", *IEEE Electrical Power and Energy Conference*, Toronto, Canada, Oct. 2018.
40. **Genders, W**., Razavi, S. (2018). "Evaluating reinforcement learning state representations for adaptive traffic signal control", *the 9th International Conference on Ambient Systems, Networks and Technologies.* Porto, Portugal, May 2018. *https://doi.org/10.1016/j.procs.2018.04.008.*
41. **Genders, W**., Razavi, S. (2018). "Evaluating the Generalization of Actor-Critic Traffic Signal Control", poster presented at the *97th Transportation Research Board Annual Meeting (TRB)*, Jan. 2018, Washington. DC.
42. **Du, S**., Razavi, S., **Genders, W**. (2017). "Optimal Variable Speed Limit Control under Connected Work Zone and Connected Vehicle Environment", the 34th International Symposium on Automation and Robotics in Construction (ISARC 2017), June 28 – July 1, 2017, Taipei, Taiwan
43. **Wang, J.,** Razavi, S., Brilakis, I. (2017). "A Comprehensive Spatio-Temporal Network-based Model for Dynamic Risk Analysis on Struck-by-Equipment Hazard", *the 2017 International Workshop on Computing for Civil Engineering (IWCCE*), June 2017, Seattle, WA, USA
44. **Wang, J.** and Razavi, S. (2017) "A Study on the Dynamic Safety Risk of Struck-by-Equipment Hazard: Risk analysis, Prediction and Safety Performance Evaluation" *CSCE/CRC International Construction Specialty Conference,* May 31-June 3, Vancouver, British Columbia.
45. **Roofigari-Esfahan, N., Du, S.,** Anumba, C., Razavi, S.(2017), "Smart Tracking of Highway Construction Projects", *the 2017 International Workshop on Computing for Civil Engineering (IWCCE*), June 2017, Seattle, WA, USA
46. **Genders, W., Wang, J.,** Razavi, S. (2016). "Smartphone Construction Safety Awareness System: A Cyber-Physical System Approach", the *16th International Conference on Computing in Civil and Building Engineering*, July 2016, Osaka, Japan.
47. **Wang, J.,** Razavi, S. (2016). "Time-Cuboid Model with Reduced False Alarms for Construction Safety", *Construction Research Congress (CRC2016),* San Juan, Puerto Rico, May 2016.
48. **Wang, J., Du, S**. and Razavi, S. (2016) "An Integrated INS-GPS-Raspberry Pi System Using the Time-Sphere Model for Real-Time Identification of Struck-by-Equipment Hazard." *the 33rd International Symposium on Automation and Robotics in Construction*, Alabama, US.

49. **Roofigari-Esfahan, N.,** Attalla, M. Khurshid, K., Saeed, N., Huang, T., Razavi, S. (2016). "Employing Unmanned Aerial Vehicles to Enhance building Roof Inspection Practices: A Case Study", Proceeding of *Canadian Society for Civil Engineering (CSCE) Conference*, London, ON, Canada
50. **Wang, J.,** Razavi, S.N. (2015). "Situational Awareness for Construction Safety Risks Management (SA4SR)", Poster Presentation at *the Construction Industry Institute (CII) Annual Conference*, Boston, MA, Aug 2015.
51. **Roofigari-Esfahan, N., Wang, J.,** Razavi, S. (2015) "An Integrated Framework to Prevent Unsafe Proximity Hazards in Construction by Optimizing Spatio-Temporal Constraints". *International Construction Specialty Conference (ICSC) of Canadian Society for Civil Engineering (CSCE) 2015,* Vancouver, BC, Canada.
52. **Roofigari-Esfahan, N**. and Razavi, S. (2015) "Optimizing Linear Schedules: Congestion-Minimization Approach". *International Construction Specialty Conference (ICSC) of Canadian Society for Civil Engineering (CSCE) 2015*- Vancouver, BC, Canada.
53. **Roofigari-Esfahan, N**. and Razavi, S. (2015) "Scheduling Optimization of Linear Projects Considering Spatio-Temporal Constraints". *International Construction Specialty Conference (ICSC) of Canadian Society for Civil Engineering (CSCE) 2015*- Vancouver, BC, Canada.
54. **Wang, J.,** Razavi, S. (2015). "An Unsafe Proximity Detection Model to Decrease False Alarms for Construction Applications", *International Conference on Civil and Building Engineering Informatics* (ICCBEI 2015), Tokyo, Japan.
55. **Olia, A.,** Abdelgawad, H., Abdulhai, B., Razavi, S., (2015). "Traffic-Flow Characteristics of Cooperative vs. Autonomous Automated Vehicles", *Transportation Research Board 94rd Annual Meeting*. No. 15-3225
56. **Divakarla, K.,** Nalakath, S., Drennan, M., Ahmed, R., Emadi, A.,Razavi S., (2015)., "Battery Characterization and State-of-Charge Prediction for Different Journey Conditions with the help of the Journey Mapping Concept", IEEE Industrial Electronics Society (IECON2015), Yokohama, Japan.
57. **Divakarla, K**., Emadi, A., Razavi, S., (2015). "Journey Mapping – A New Approach for Defining Vehicle Drive Cycles", the *IEEE Transportation Electrification Conference (ITEC2015),* Detroit, MI.
58. **Olia, A.**, Abdelgawad, H., Abdulhai, B., Razavi S., (2014). "Assessing the Potential Benefits of Connected Vehicles: Mobility, Environmental, and Safety Perspectives", Proc. the *93th Transportation Research Board (TRB) Annual Meeting and Conference*, 14(2348), Jan. 2014, Washington, DC.
59. **Roofigari-Esfahan, N**., Paez, N., Razavi, S., (2013). "Spatio-temporal Progress Estimation for Highway Construction", Proc. the *ASCE Workshop on Computing in Civil Engineering*, Los Angeles, US, June 23-25.
60. **Roofigari-Esfahan, N**., Razavi, (2013). "GIS-based Resource-Integrated Progress Tracking for Construction Projects using Spatio-Temporal Data", Proc. the *Annual Conference of the Canadian Society for Civil Engineering*, Montreal, May 29-June 1
61. **Gender, W., Olia, A.,** Razavi, S., (2013). "Safety Impacts of V2V Communication in Construction Zones", Proc. The *Annual Conference of the Canadian Society for Civil Engineering*, Montreal, May 29-June
62. **ElSayed, M.,** El-Dakhakhni, W., Razavi, S., Mekky, W., Tait, M., (2013). "Response of One-Way Reinforced Masonry Walls to Blast Loading", Proc. *12th Canadian Masonry Symposium*, Vancouver, British Columbia, June 2-5.
63. **Roofigari-Esfahan, N.,** Razavi, S., (2012). "Location-aware resource-driven scheduling", Proc. *the Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Edmonton, Canada, June 6-9.
64. **Olia, A., Izadpanah, P.,** Razavi, S., (2012). "Construction Work Zone Traffic Management using Connected Vehicle System", Proc. *the Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Edmonton, Canada, June 6-9.
65. **Linde, J.,** Tait, M., Razavi, S., (2012). "Influence of Shrinkage Reducing Agent on the Behaviour of Steel-Concrete-CFRP Composite Columns", Proc., *the Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Edmonton, Canada, June 6-9.
66. Razavi, S.N., Montaser, A., Moselhi, O. (2011). "Applications of Zone-Specific Contextual Data Acquisition in Construction", Poster Presentation at the *Construction Industry Institute (CII) Annual Conference*, Chicago, IL, July 25-28.
67. Razavi, S.N., Moselhi, O. (2011). "Indoor Construction Location Sensing using Low Cost Passive RFID Tags", Proc., *the Annual Conference of the Canadian Society for Civil Engineering (CSCE),* Ottawa, Canada, June 14-17.

68. Jiao, B., Razavi, S.N., Moselhi, O. (2011). "Go/No-Go Decisions for BOT Projects.", Proc. *Annual Conference of the Canadian Society for Civil Engineering (CSCE),* Ottawa, Canada, June 14-17.
69. Duflos E., Vanheeghe P., Razavi, S.N., Haas C. (2010). "Belief Function-Based Algorithm for Material Detection and Tracking in Construction.", Proc., the *International Workshop on Theory of Belief Functions*, Brest, France, March 31-April 2.
70. Young, D., Nasir, H., Razavi, S.N., Haas, C., Goodrum, P., Caldas C. (2010). "Automated Materials Tracking and Locating: Impact Modelling and Estimation.", Proc*., Construction Research Congress (CRC 2010)*, Banff, Alberta, 41-50.
71. Khaleghi, B., Razavi, S.N., Khamis, A., Karray, F. (2009). "Multisensor Data Fusion: Antecedents and Directions.", Proc., *International Conference on Signals, Circuits and Systems*, IEEE, Jerba, Tunisia, November 6-8.
72. Razavi, S.N., Haas, C. (2009). "A Data Fusion Model for Location Estimation in Construction.", Proc., *International Symposium for Automation and Robotics in Construction (ISARC)*, Austin, Texas, June 24-27.
73. Razavi, S. N., Haas, C. T., Vanheeghe, P., and Duflos, E. (2009). "Real World Implementation of Belief Function Theory to Detect Dislocation of Materials in Construction.", Proc. *12th International Conference on Information Fusion*, IEEE, Seattle, VA, 748-755
74. Young, D., Razavi, S.N., Nassir, H., Haas, C. (2009). "Automated Materials Tracking and Locating.", poster presentation at the *Construction Industry Institute (CII) Annual Conference*, Reno, Nevada, July 28-30.
75. Razavi, S.N., Haas, C. (2009). "Data Fusion for Improving Location Estimation and Movement Detection with Materials Tracking and Locating Technologies.", poster presentation at the *1st Canadian Graduate Students Colloquium on Computer–Assisted Construction Technologies*, London, Ontario, June 18-19.
76. Razavi, S.N., Young, D., Nasir, H., Haas, C., Caldas, C., Goodrum, P. (2008). "Field Trial of Automated Materials Tracking in Construction.", Proc., the *Annual Conference of the Canadian Society for Civil Engineering (CSCE) ,* Quebec, Canada, 3 1503-11.
77. Caron F., Razavi S.N., Song J., Haas C., Vanheeghe P., Duflos E., Caldas C. (2006). "Models for Locating RFID Nodes.", Proc., *Joint International Conference on Computing and Decision Making in Civil and Building Engineering*, Montreal, Canada, June 14-16.
78. Razavi, S.N., Caron, F., Song, J., Caldas, C., Haas, C. (2006). "Models for Locating RFID Nodes.", poster presentation at the *Transportation Research Board (TRB) conference on RFID in Transportation*, Washington D.C., October 17-18.
79. Barari L., Razavi S.N., Fathy M. (2005). "Video Shot Detection via Information Theory", Proc., International Conference on Information and Knowledge Technology (IKT 2005), Tehran, Iran, May 24-26.
80. Fathy, M., Farshad J.F., Razavi S.N., Sadat Hoseini S.M. (2003). "Traffic Monitoring System Using Moving Camera", Proc., National Conference on Image Processing and Machine Vision, Tehran, Iran, Feb.13-15.
81. Razavi, S.N., Fathy, M., (2002). "Qualitative Traffic Analysis using Image Processing and Time–Delayed Neural Network.", Proc., IEEE International Conference on Intelligent Transportation Systems, IEEE, Singapore, 3-6 Sep.
82. Razavi, S.N. (2010). "Data Fusion for Location Estimation in Construction.", Ph.D. Thesis, Department of civil and environmental engineering, University of Waterloo. Supervisor: Dr. Carl Haas, other committee members: Dr. Osama Moselhi, Dr. Fakhri Karray, Dr. Tarek Hegazi, and Dr. Susan Tighe.
83. Razavi, S.N. (2002). "Quantitative Analysis of Urban Traffic Using Image Processing and Time-Delayed Neural Networks.", M.Sc. Thesis, Department of Computer Engineering, Iran University of Science and Technology. Supervisor: Prof. Mahmood Fathy, other committee members: Dr. Jahed Motlagh, Dr. Mozayeni
84. Razavi, S.N., (1996). "Library Information Management System Using Barcode." B.Sc. Thesis, Department of Computer Engineering, Sharif University of Technology, Supervisor: Dr. Amir H. Jahangir.

Non-Peer Reviewed

Journal Articles

1. Karbasi, AH.,Yang, H., Razavi, S. (2024). "Exploring the impact of traffic signal control and connected and automated vehicles on intersections safety: A deep reinforcement learning approach"., arXiv preprint arXiv:2405.19236.
2. **Genders, W.,** and Razavi, S. (2019). "An open-source framework for adaptive traffic signal control", *arXiv preprint arXiv:1909.00395*.
3. **Genders, W.,** and Razavi, S. (2016). "Using a deep reinforcement learning agent for traffic signal control", arXiv preprint arXiv:1611.01142.

Community Engagement and Knowledge Exchange

1. Provided a keynote lecture for the IEEE Intelligent Transportation Systems Society's Young Professionals and Women in Engineering committees on the Career Journey in Intelligent Transportation Systems (IEEE ITSC). The lecture was attended by more than 100 people and was held on Sep. 25, 2023, in Bilbao, Spain.
2. Provided expert knowledge through consultation and interview on developing a taxonomy for Cyber-Physical Systems (CPS) for the Architecture, Engineering, and Construction Industry (AEC-CPS) IRB-23-263, June 2023.
3. McMaster Institute for Transportation and Logistics, (2022), "Foundational Study on Cross-Border Short-Sea Shipping Opportunities", as the principal investigator, I contributed to the research knowledge development and exchange with principle stakeholders, i.e., Transport Canada and Hamilton-Oshawa Port Authority, the final report prepared for Transport Canada in Dec. 2022
4. Co-Founder of the professional monthly speaker series at McMaster Institute for Transportation and Logistics, entitled "In-Conversation with MITL- Luncheon Series", March 2022 - Present
5. McMaster Institute for Transportation and Logistics, (2021), "On the Development of Fluid Intelligence in Support of Regional Supply Chains", Report Prepared for Transport Canada, March 2021
6. McMaster Institute for Transportation and Logistics, (2021), "Seed Project Plan to Support the Development of Fluid Intelligence", Report Prepared for Transport Canada, Jan. 2021
7. Razavi, S. (2020), " Digital infrastructure is the new frontier", The Hill Times' Special Issue on Infrastructure.
8. Hamilton Transportation Task Force, (2020) "Hamilton Transportation Task Force Report", Presented to the Ontario Minister of Transportation on March 16, 2020.
9. McMaster Institute for Transportation and Logistics, (2020) "Multi-Sensor Data Fusion in Support of Port Logistics: Traffic State Estimation", Report Prepared for Transport Canada
10. McMaster Institute for Transportation and Logistics, (2020) "Analyzing and Structuring Marine Data Sources to Support HOPA Supply Chain Visibility", Report Prepared for Transport Canada
11. McMaster Institute for Transportation and Logistics, (2020) "Advancing Supply Chain and Logistics in Hamilton-Niagara Region – Forum Report", Report Prepared for Transport Canada
12. McMaster Institute for Transportation and Logistics, (2020) "Exploring Goods Movement and Export Diversification for Niagara Region Firms", Report Prepared for Transport Canada
13. McMaster Institute for Transportation and Logistics, (2019) "Strategic Supply Chain Knowledge Development in the Hamilton-Niagara Area", Report Prepared for Transport Canada
14. Byrne, K, Hassan, H., Ferguson, M., Vrkljan, B., Newbold, B., Razavi, S. (2019) Maintaining the Mobility of Older Canadians: Examining the Transition from Driving to Driving Cessation", Poster Presentation at the 2019 Annual McMaster Institute for Research In Aging (MIRA) and Labarge Research Day
15. Hassan, H., Byrne, K, Ferguson, M., Vrkljan, B., Newbold, B., Razavi, S. (2018) Maintaining the Mobility of Older Canadians: Examining the Transition from Driving to Driving Cessation", Poster Presentation at the 2018 Annual McMaster Institute for Research In Aging (MIRA) and Labarge Research Day
16. Haas, C., Razavi, S., (2012). "Use of RFID Tags for Tools and Materials Management", Ontario Electrical Contractors Magazine, 50(10), 12-14.

Other, including Proceedings of Meetings

1. McMaster and University of Liverpool establish seed fund for collaborative research - Brighter World, May 14, 2024

2. Ottawa shortlists three groups to vie for Toronto-Quebec City rail line - The Globe and Mail, July 21, 2023
3. Transport minister meets with McMaster transportation experts, McMaster Daily News, November 9, 2022
4. Hamilton's post-LRT task force made its $1B recommendation Monday, CBC News Hamilton, March 16, 2020
5. Ontario Appoints Hamilton Transportation Task Force, Ontario Newsroom, Jan. 23, 2020.
6. Province forms Hamilton Transportation Task Force to recommend how $1B should be spent, Global News, Jan. 22, 2020
7. McMaster transportation expert named to provincial task force: Dr. Saiedeh Razavi cannot promote McMaster projects for funding, Hamilton Spectator, Jan. 25, 2020
8. Crane and Hoist Canada, Jan. 2017, Ontario University Researchers Aiming to Reduce False Alarms from Anti-Collision Systems, by Saul Chernos.
9. Big Data Soapbox: Saiedeh Razavi, Nov. 3, 2015, "Stay Connected, Stay Safe"
10. How will you change the world?, Dec. 2015, "Using Locational Awareness for Safety"
11. Daily Commercial News, Jan. 24, 2015, "Heavy Construction Mixer Builds Partnerships", by Lindsey Cole
12. MacEngineer Magazine, Fall 2015, "Using Locational Awareness for Safety"
13. MacEngineer Magazine, Spring 2015, "Knowing the Dangers Can Save Lives"
14. The Road Builder, Spring/summer 2012, "Saiedeh Razavi Outlines Roadmap as McMaster's Heavy Construction Chair", by Matthew Bradford
15. Daily Commercial News, March 17th, 2012, "McMaster U civil engineering professor Razavi involves industry in academia", by Kelly Lapointe.
16. McMaster Daily-News, May 30, 2011, "Razavi named Chair in Heavy Construction", by Faculty of Engineering.
17. The Hamilton Spectator, May 31, 2011, "Filling Mac Construction Chair a 7-Year Effort", by Meredith MacLeod.
18. Daily Commercial News, June 3, 2011, "Civil Engineer Saiedeh Razavi Chair of Heavy Construction at McMaster University in Hamilton" by PATRICIA WILLIAMS.
19. CBC Radio, Here and Now, Live interview, May 30, 2011, 4:20 pm.
20. Wave947FM, Radio interview, May 30, 2011.
21. Construction Canada newsletter, June 15, 2011, "McMaster University Names First Chair in Heavy Construction"
22. Mechanical Contractors Association of Hamilton, Scholarship Awards Press Release, Sep. 8, 2011, by Wanda Heimbecker
23. ITE Journal, , July 2011, People and the Professions
24. Mechanical Contractors Association of Hamilton, Newsletter, Volume 12, issue 1, "MCMASTER UNIVERSITY HEAVY CONSTRUCTION CHAIR WELCOMES SAIEDEH RAZAVI"
25. National Journal of Concrete Pipe Industry, Summer 2011, "Razavi Named Chair in Heavy Construction at McMaster University", published by the Ontario Concrete Pipe Association

Unpublished Documents

Technical Report Series

1. **Wang, J., Genders, W.**, Razavi, S. (2016). "Telematics Lane by Lane Testing Analysis", Final Report Prepared for the Ministry of Transportation of Ontario.
2. **Genders, W**., Darwish, A., Razavi, S., Hranilovic, D. (2015) "Impact of DSRC Model on Connected Vehicle Forward Collision Warning in a Dense Urban Environment", Internal Technical Report
3. Razavi, S.N., **Izadpanah P**., (2012). "Implications of Implementing Connected Vehicles Strategies on Transportation Management", Final Report Prepared for the Ministry of Transportation of Ontario.

PRESENTATIONS AT MEETINGS

Invited

1. Supply Chain Opportunities in Port Cities: Lessons for Liverpool and Hamilton, "Managing Disruptions & Advancing Sustainability in Freight Transport: Modal Shift Matters", March 26, 2025, Ron Joyce Centre, DeGroote School of Business, Burlington, ON,
2. Women in Mobility Speaker at the *IEEE International Conference on Smart Mobility (IEEE SM) 2024,* "Driving Toward Success: Navigating Your Career in Smart Mobility", Sep. 17, 2024, Niagara Falls, Canada.
3. Keynote speaker at McMaster's Women in Construction Symposium, "Breaking Ground: Empowering Women in Engineering and Construction", March 28, 2024, Hamilton, ON, Canada
4. Keynote speaker at the Navigating Horizons event of the *IEEE Intelligent Transportation Systems Conference (ITSC) 2023*, "Crafting Your Career Journey in the Interdisciplinary and Ever-Evolving World of Intelligent Transportation Systems", Sep. 24, 2023, Bilbao, Spain
5. Transportation Research Board (TRB) 2023 Annual Meeting , "Opportunities for Synchromodal Freight Transportation for US-Canada Transborder Trade in Great Lakes: Conceptualization and Descriptive Analysis", Jan 9, 2023, Washington DC
6. Panel Moderator, International Conference on Future of Transportation: Fast Lane to Smart Transportation, Panel Discussion on "Dismantling Go-To-Market Barriers", Nov. 4, 2021, Virtual
7. Transport Canada's Workshop on "Advancing Data Steward Collaboration in the Greater Golden Horseshoe Region", Opening Remarks, March 15, 2021, Virtual
8. Ontario Traffic Council's symposium on Autonomous Vehicles and Connected Cities, "Autonomous Supply Chain: Shaping the Future of Goods Movement", March 9, 2021, Virtual
9. Panelist, International Conference on Future of Transportation and Mobility Conference, Panel Discussion on Goods Movement and the Transition to Autonomous Operations, March 2, 2021, Virtual
10. E-Learning Webinar For Civil Engineering and Enhanced Programs: Sharing Best Practices and Tips, June 20, 2020, Virtual
11. MITL-Transport Canada Online Forum on "Infrastructure Improvements and the Supply Chain", Opening Remarks, Aug.19, 2020, Virtual
12. MITL-Transport Canada Online Forum on "Increasing the Competitiveness of Regional Supply", Opening Remarks, July 8, 2020, Virtual
13. MITL-Transport Canada Online Forum on "Leveraging and Integrating Data for the Marine Sector", opening remarks, July 29, 2020, Virtual
14. MITL-Transport Canada Online Forum on "Supply Chain Oriented Insights from Recent Hamilton-Niagara Initiatives/Research", opening remarks, June 17, 2020, Virtual
15. Texas A&M Transportation Institute and MITL, Port Logistics Research Exchange, Online Meeting, Sep. 10, 2020, Virtual
16. Hamilton-Oshawa Port Authority, Multimodal Supply Chain Data Analytics Partnership, Online Meeting, July 30, 2020, Virtual
17. Smart City Panel: How does digital infrastructure impact safety, Panel Discussion as a part of the Future of Transportation and Mobility Conference, AVIN, Oshawa, March 2019
18. The 26th International Workshop on Intelligent Computing in Engineering (Eg-ICE 2019), "Fault-Tolerant Variable Speed Limit Control for Freeway Work Zone", June 30 – July 03, 2019, Louven, Belgium
19. McMaster University Panel Discussion on "The 4th Industrial Revolution: How the Growth of Technology Will Shape Careers in the Civil/Construction Industry", Panelist, Jan. 2019
20. McMaster University-Region of Saxony joint Workshop on Smart Mobility, Opening Remarks, McMaster Innovation Park, 2018
21. Insights on Canada's Transition to Electric Mobility, Opening Remarks, Ron Joyce Centre, DeGroote School of Business, McMaster Institute for Transportation and Logistics, Nov. 2018
22. McMaster Institute for Transportation and Logistics (MITL) Strategic Planning Workshop, "Where We Are", Ancaster Mill, Nov. 2018

23. Ontario Ministry of Economic Development, Job Creation and Trade Meeting at McMaster University, “Smart Mobility at the McMaster Institute for Transportation and Logistics (MITL)”, McMaster University, Oct. 2018
24. National Research Council Canada (NRC) Meeting at McMaster University, “Introduction to the McMaster Institute for Transportation and Logistics (MITL)”, McMaster University, Oct. 2018
25. McMaster Institute for Research on Aging (MIRA), “Maintaining the Mobility of Older Canadians: Examining the Transition from Driving to Driving Cessation”, Oct. 2018
26. McMaster Institute for Research on Aging (MIRA), Technology + Design for Optimal Aging Networking event, “Advanced Transportation Technologies Implications for Older Canadians”, Presented in collaboration with Dr. Brenda Vrkljan, McMaster University, Nov. 2017.
27. Parliament of Canada’s Research Matter Event, “How Are We Making Transportation More Sustainable?”, Parliament Hill, Ottawa, Canada., May 2017.
28. Tigercat Industries Inc. – McMaster Engineering Meeting, “Introducing McMaster Institute for Transportation and Logistics and the McMaster Heavy Construction Chair”, McMaster University, June 2017.
29. Picco Engineering – McMaster Engineering Meeting, “Industry Engagement Opportunities”, McMaster University, Dec. 2016.
30. 8th Heavy Construction Chair Advisory Board Meeting, “Heavy Construction chair report on activities and plans”, Hamilton, ON., Feb. 2017.
31. Engineering with Purpose – In Partnership with the University of Notre Dame, “Student Experiential Learning and Engagement: Heavy Construction Internship Program, McMaster University, July 2016.
32. Hamilton and District Heavy Construction Association’s Board Meeting, “McMaster Heavy Construction Chair Review and Report”, Hamilton, June 2016.
33. 7th Heavy Construction Chair Advisory Board Meeting, “Heavy Construction chair report on activities and plans”, Hamilton, ON, Feb. 4, 2016.
34. Transportation Research Board Workshop on Cyber-Physical Systems in Construction, “A Multi-Layer Framework for Cyber-Physical Systems in Construction Projects”, Washington D.C., Jan. 2016.
35. Social Innovation through Big Data - Big Ideas, Better Cities, “Stay Connected, Stay Safe”, soapbox presentation, Hamilton, ON, Nov. 3, 2015.
36. Pennsylvania State University (Penn State), The Department of Architectural Engineering, “Connected Construction and Smart Work Zones”, Aug. 30, 2015.
37. Aecon Group Inc. – McMaster Meeting, “Engagement with Industry for Construction Education and Research”, Hamilton, ON, May 2015.
38. Mechanical Contractors Association of North America’s Student Chapter Summit, “Location Sensing in Construction”, Waterloo, ON, Feb. 27, 2015.
39. Ministry of Transportation of Ontario’s Women in Engineering Conference, “Engineer Your Life”, Toronto, ON, Nov. 13, 2014.
40. 6th Heavy Construction Chair Advisory Board Meeting, “Heavy Construction chair report on activities and plans”, Hamilton, ON, Jan. 26, 2015.
41. Ministry of Transportation of Ontario Operation Management Team Meeting, “Connected Civil Infrastructure”, St. Catharines, ON., May 7, 2014.
42. McMaster’s Engineering Faculty Retreat – Rising Stars, “Connected Civil Infrastructure:
43. Construction, Operations, Maintenance”, Hamilton, ON, Dec. 16, 2013.
44. 5th Heavy Construction Chair Advisory Board Meeting, “Heavy Construction Chair report on activities and plans”, Hamilton, ON, March 13, 2014.
45. 4th Heavy Construction Chair Advisory Board Meeting, “Heavy Construction Chair report on activities and plans”, Hamilton, ON, Oct. 8, 2013.
46. Bot Construction Group, “Connected Vehicles in Construction”, Oakville, ON., July 2013.
47. 3rd Heavy Construction Chair Advisory Board Meeting, “Heavy Construction Chair report on activities and plans”, Hamilton, ON, Feb. 15, 2013.
48. Ontario Road Builders’ Association (ORBA) Convention, “A Perspective on the Construction Education and Research”, Toronto, ON, Feb 7, 2012.
49. 2nd Heavy Construction Chair Advisory Board Meeting, “Heavy Construction Chair report on activities and plans”, Hamilton, ON., Jan. 30, 2012.

50. 1st Heavy Construction Chair Advisory Board Meeting, "Heavy Construction Chair report on activities and plans", Hamilton, ON., Sep. 28, 2012.
51. The Richard C. Goodwin College of Professional Studies, Drexel University, "Construction Education Models", Philadelphia, PA, Jan. 2011.
52. McMaster University, Civil Engineering Department, "Multisensor Data Fusion for Materials Tracking in Construction", Hamilton, ON, Dec. 2010.
53. Concordia University, Civil, Building, and Environmental Engineering, "Data Fusion for Construction Location Sensing", Montreal, QC, Sep. 2010.
54. Polytechnic Institute of New York University, Civil Engineering Department, "Multisensor Data Fusion for Materials Tracking in Construction", New York, NY, 2010.
55. University of Michigan, Civil Engineering Department, University of Michigan, "Multi-sensor data fusion for on-site materials location sensing in construction", Ann Arbor, MI, 2010.

Contributed

Peer Reviewed

1. **Ma, Y.**, Hassini, E., Razavi, S., (2024). "Data-Driven Analysis of Sustainable Truck Routing: Tradeoffs Between Efficiency and Emissions", Transportation Association of Canada Conference (TAC 2024), Vancouver, Canada.
2. **Amiri, A.,** Razavi, S., (2021). "Autonomous vehicle technology for shaping the future of goods movement: a case study for Ontario", ITS Canada Conference
3. **Rasouli, R.,** Mohamed, M., Razavi, S., (2021). "Costs and Benefits of Shared Mobility in a Suburban Context: The Impact of Powertrain Technology", *Canadian Transportation Research Forum Annual Conference*, May 2021.
4. **Hassan, H.**, Lauzon, M.R., Ferguson, M., Newbold, B., Vrkljan, B., Razavi, S. (2021) "Factors affecting older adults' satisfaction with their mobility options: A survey-based analysis" Presentation at the *Transportation Research Board (TRB)* 2021 *Annual Meeting*, Online.
5. **Eskandar, S.,** Razavi, S., (2020). "Using Deep Learning for Assessment of Workers' Stress and Overload", the 37th International Symposium on Automation and Robotics in Construction (ISARC 2020), Oct. 2020, Online.
6. **Hassan, H.**, Byrne, K., Ferguson, M., Vrkljan, B., Newbold, B., Razavi, S., (2020) "Older Canadians' Preferences, Challenges and Concerns to Use Current and Emerging Transportation Alternatives", Presentation at the *Transportation Research Board (TRB)* 2020 *Annual Meeting*, Washington. DC., January 2020
7. **Wang, J.**, Razavi, S., (2019). "Network-based Safety Leading Indicators for Safety Risk Analysis in Construction", *the 63rd Human Factors and Ergonomics Society (HFES) International Annual Meeting,* Oct. 28th-Nov. 1st, 2019, Seattle, Washington.
8. **Du, S**, Razavi, S., (2019). "Fault-Tolerant Variable Speed Limit Control for Freeway Work Zone", the *26th International Workshop on Intelligent Computing in Engineering* (Eg-ICE 2019), June 30 – July 03, 2019, Louven, Belgium.
9. **Eskandar, S., Wang, J.,** Razavi, S., (2019)."A Review of Social, Physiological, and Cognitive Factors Affecting Construction Safety", the 36th International Symposium on Automation and Robotics in Construction (ISARC 2019), May 21-24, 2019, Banff, Alberta.
10. **Du, S**, Razavi, S., (2019). "Freeway Work Zone Traffic State Estimation with Fault Diagnosis", 2019 European Conference on Computing in Construction, July 10-12, 2019, Chania, Greece.
11. **Hassan, H.**, Faroogui, N., Ferguson, M., Razavi, S. (2019). "Examining Contributing Factors to Motorcycle Crashes using Matched Case-Control Logistic Regression", Presentation at the *2019 TRB Annual Meeting*, Washington. DC.
12. **Hassan, H.**, Ferguson, M., Razavi, S., Vrkljan B. (2018). "Factors that influence Older Canadians' Preferences for using Autonomous Vehicle Technology: A Structural Equation Analysis", Presentation at the *2019 TRB Annual Meeting, Washington, DC.*
13. Hamilton, R., Seager, H., **Divakarla, K.,** Emadi, A., Razavi, S. **(2018).** "Modeling and Simulation of an Autonomous-capable Electrified Vehicle: A Review", *IEEE Electrical Power and Energy Conference*, Toronto, Canada, Oct. 2018.

14. **Genders, W**., Razavi, S. (2018). "Evaluating reinforcement learning state representations for adaptive traffic signal control", *the 9th International Conference on Ambient Systems, Networks and Technologies.* Porto, Portugal, May 2018. *https://doi.org/10.1016/j.procs.2018.04.008.*
15. **Genders, W**., Razavi, S. (2018). "Evaluating the Generalization of Actor-Critic Traffic Signal Control", poster presented at the *97th Transportation Research Board Annual Meeting (TRB)*, Jan. 2018, Washington. DC.
16. **Du, S**., Razavi, S., **Genders, W**. (2017). "Optimal Variable Speed Limit Control under Connected Work Zone and Connected Vehicle Environment", the 34th International Symposium on Automation and Robotics in Construction (ISARC 2017), June 28 – July 1, 2017, Taipei, Taiwan
17. **Wang, J.,** Razavi, S., Brilakis, I. (2017). "A Comprehensive Spatio-Temporal Network-based Model for Dynamic Risk Analysis on Struck-by-Equipment Hazard", *the 2017 International Workshop on Computing for Civil Engineering (IWCCE*), June 2017, Seattle, WA, USA
18. **Wang, J.** and Razavi, S. (2017) "A Study on the Dynamic Safety Risk of Struck-by-Equipment Hazard: Risk analysis, Prediction and Safety Performance Evaluation" *CSCE/CRC International Construction Specialty Conference,* May 31-June 3, Vancouver, British Columbia.
19. **Roofigari-Esfahan, N., Du, S.,** Anumba, C., Razavi, S.(2017), "Smart Tracking of Highway Construction Projects", *the 2017 International Workshop on Computing for Civil Engineering (IWCCE*), June 2017, Seattle, WA, USA
20. **Genders, W., Wang, J.,** Razavi, S. (2016). "Smartphone Construction Safety Awareness System: A Cyber-Physical System Approach", the *16th International Conference on Computing in Civil and Building Engineering*, July 2016, Osaka, Japan.
21. **Wang, J.,** Razavi, S. (2016). "Time-Cuboid Model with Reduced False Alarms for Construction Safety", *Construction Research Congress (CRC2016),* San Juan, Puerto Rico, May 2016.
22. **Wang, J., Du, S**. and Razavi, S. (2016) "An Integrated INS-GPS-Raspberry Pi System Using the Time-Sphere Model for Real-Time Identification of Struck-by-Equipment Hazard." *the 33rd International Symposium on Automation and Robotics in Construction*, Alabama, US.
23. **Roofigari-Esfahan, N.,** Attalla, M. Khurshid, K., Saeed, N., Huang, T., Razavi, S. (2016). "Employing Unmanned Aerial Vehicles to Enhance building Roof Inspection Practices: A Case Study", Proceeding of *Canadian Society for Civil Engineering (CSCE) Conference*, London, ON, Canada
24. **Wang, J.,** Razavi, S.N. (2015). "Situational Awareness for Construction Safety Risks Management (SA4SR)", Poster Presentation at *the Construction Industry Institute (CII) Annual Conference*, Boston, MA, Aug 2015.
25. **Roofigari-Esfahan, N., Wang, J.,** Razavi, S. (2015) "An Integrated Framework to Prevent Unsafe Proximity Hazards in Construction by Optimizing Spatio-Temporal Constraints". *International Construction Specialty Conference (ICSC) of Canadian Society for Civil Engineering (CSCE) 2015,* Vancouver, BC, Canada.
26. **Roofigari-Esfahan, N**. and Razavi, S. (2015) "Optimizing Linear Schedules: Congestion-Minimization Approach". *International Construction Specialty Conference (ICSC) of Canadian Society for Civil Engineering (CSCE) 2015*- Vancouver, BC, Canada.
27. **Roofigari-Esfahan, N**. and Razavi, S. (2015) "Scheduling Optimization of Linear Projects Considering Spatio-Temporal Constraints". *International Construction Specialty Conference (ICSC) of Canadian Society for Civil Engineering (CSCE) 2015*- Vancouver, BC, Canada.
28. **Wang, J.,** Razavi, S. (2015). "An Unsafe Proximity Detection Model to Decrease False Alarms for Construction Applications", *International Conference on Civil and Building Engineering Informatics* (ICCBEI 2015), Tokyo, Japan. **Received Best Paper Presentation Award**
29. **Olia, A.,** Abdelgawad, H., Abdulhai, B., Razavi, S., (2015). "Traffic-Flow Characteristics of Cooperative vs. Autonomous Automated Vehicles", *Transportation Research Board 94rd Annual Meeting*. No. 15-3225
30. **Divakarla, K.,** Nalakath, S., Drennan, M., Ahmed, R., Emadi, A.,Razavi S., (2015)., "Battery Characterization and State-of-Charge Prediction for Different Journey Conditions with the help of the Journey Mapping Concept", IEEE Industrial Electronics Society (IECON2015), Yokohama, Japan.
31. **Divakarla, K**., Emadi, A., Razavi, S., (2015). "Journey Mapping – A New Approach for Defining Vehicle Drive Cycles", the *IEEE Transportation Electrification Conference (ITEC2015),* Detroit, MI.
32. **Olia, A.,** Abdelgawad, H., Abdulhai, B., Razavi S., (2014). "Assessing the Potential Benefits of Connected Vehicles: Mobility, Environmental, and Safety Perspectives", Proc. the *93th Transportation Research Board (TRB) Annual Meeting and Conference*, 14(2348), Jan. 2014, Washington, DC.

33. **Roofigari-Esfahan, N**., Paez, N., Razavi, S., (2013). "Spatio-temporal Progress Estimation for Highway Construction", Proc. the *ASCE Workshop on Computing in Civil Engineering*, Los Angeles, US, June 23-25.
34. **Roofigari-Esfahan, N**., Razavi, (2013). "GIS-based Resource-Integrated Progress Tracking for Construction Projects using Spatio-Temporal Data", Proc. the *Annual Conference of the Canadian Society for Civil Engineering*, Montreal, May 29-June 1
35. **Gender, W., Olia, A.,** Razavi, S., (2013). "Safety Impacts of V2V Communication in Construction Zones", Proc. The *Annual Conference of the Canadian Society for Civil Engineering*, Montreal, May 29-June
36. **ElSayed, M.,** El-Dakhakhni, W., Razavi, S., Mekky, W., Tait, M., (2013). "Response of One-Way Reinforced Masonry Walls to Blast Loading", Proc. *12th Canadian Masonry Symposium*, Vancouver, British Columbia, June 2-5.
37. **Roofigari-Esfahan, N.,** Razavi, S., (2012). "Location-aware resource-driven scheduling", Proc. *the Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Edmonton, Canada, June 6-9.
38. **Olia, A., Izadpanah, P.,** Razavi, S., (2012). "Construction Work Zone Traffic Management using Connected Vehicle System", Proc. *the Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Edmonton, Canada, June 6-9.
39. **Linde, J.,** Tait, M., Razavi, S., (2012). "Influence of Shrinkage Reducing Agent on the Behaviour of Steel-Concrete-CFRP Composite Columns", Proc., *the Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Edmonton, Canada, June 6-9.
40. Razavi, S.N., Montaser, A., Moselhi, O. (2011). "Applications of Zone-Specific Contextual Data Acquisition in Construction", Poster Presentation at the *Construction Industry Institute (CII) Annual Conference*, Chicago, IL, July 25-28.
41. Razavi, S.N., Moselhi, O. (2011). "Indoor Construction Location Sensing using Low Cost Passive RFID Tags", Proc., *the Annual Conference of the Canadian Society for Civil Engineering (CSCE),* Ottawa, Canada, June 14-17.
42. Jiao, B., Razavi, S.N., Moselhi, O. (2011). "Go/No-Go Decisions for BOT Projects.", Proc. *Annual Conference of the Canadian Society for Civil Engineering (CSCE),* Ottawa, Canada, June 14-17.
43. Duflos E., Vanheeghe P., Razavi, S.N., Haas C. (2010). "Belief Function-Based Algorithm for Material Detection and Tracking in Construction.", Proc., the *International Workshop on Theory of Belief Functions*, Brest, France, March 31-April 2.
44. Young, D., Nasir, H., Razavi, S.N., Haas, C., Goodrum, P., Caldas C. (2010). "Automated Materials Tracking and Locating: Impact Modelling and Estimation.", Proc*., Construction Research Congress (CRC 2010)*, Banff, Alberta, 41-50.
45. Khaleghi, B., Razavi, S.N., Khamis, A., Karray, F. (2009). "Multisensor Data Fusion: Antecedents and Directions.", Proc., *International Conference on Signals, Circuits and Systems*, IEEE, Jerba, Tunisia, November 6-8.
46. Razavi, S.N., Haas, C. (2009). "A Data Fusion Model for Location Estimation in Construction.", Proc., *International Symposium for Automation and Robotics in Construction (ISARC)*, Austin, Texas, June 24-27.
47. Razavi, S. N., Haas, C. T., Vanheeghe, P., and Duflos, E. (2009). "Real World Implementation of Belief Function Theory to Detect Dislocation of Materials in Construction.", Proc. *12th International Conference on Information Fusion*, IEEE, Seattle, VA, 748-755
48. Young, D., Razavi, S.N., Nassir, H., Haas, C. (2009). "Automated Materials Tracking and Locating.", poster presentation at the *Construction Industry Institute (CII) Annual Conference*, Reno, Nevada, July 28-30.
49. Razavi, S.N., Haas, C. (2009). "Data Fusion for Improving Location Estimation and Movement Detection with Materials Tracking and Locating Technologies.", poster presentation at the *1st Canadian Graduate Students Colloquium on Computer–Assisted Construction Technologies*, London, Ontario, June 18-19.
50. Razavi, S.N., Young, D., Nasir, H., Haas, C., Caldas, C., Goodrum, P. (2008). "Field Trial of Automated Materials Tracking in Construction.", Proc., the *Annual Conference of the Canadian Society for Civil Engineering (CSCE) ,* Quebec, Canada, 3 1503-11.
51. Caron F., Razavi S.N., Song J., Haas C., Vanheeghe P., Duflos E., Caldas C. (2006). "Models for Locating RFID Nodes.", Proc., *Joint International Conference on Computing and Decision Making in Civil and Building Engineering*, Montreal, Canada, June 14-16.

52. Razavi, S.N., Caron, F., Song, J., Caldas, C., Haas, C. (2006). "Models for Locating RFID Nodes.", poster presentation at the in *Transportation Research Board (TRB) conference on RFID in Transportation*, Washington D.C., October 17-18. Barari L., Razavi S.N., Fathy M. (2005). "Video Shot Detection via Information Theory", Proc., International Conference on Information and Knowledge Technology (IKT 2005), Tehran, Iran, May 24-26.
53. Fathy, M., Farshad J.F., Razavi S.N., Sadat Hoseini S.M. (2003). "Traffic Monitoring System Using Moving Camera", Proc., National Conference on Image Processing and Machine Vision, Tehran, Iran, Feb.13-15.
54. Razavi, S.N., Fathy, M., (2002). "Qualitative Traffic Analysis using Image Processing and Time–Delayed Neural Network.", Proc., IEEE International Conference on Intelligent Transportation Systems, IEEE, Singapore, 3-6 Sep.

ADMINISTRATIVE RESPONSIBILITIES

Department

2024 – 2025	Member, Graduate Affairs Committee, McMaster Department of Civil Engineering
2024 – 2025	Member, Awards and Scholarship Committee, McMaster Department of Civil Engineering
2023 – 2024	Member, Graduate Affairs Committee, McMaster Department of Civil Engineering
2023 – 2024	Member, Awards and Scholarship Committee, McMaster Department of Civil Engineering
2022 – 2023	Member, Graduate Affairs Committee, McMaster Department of Civil Engineering
2021 – 2022	Associate Chair Graduate Studies, McMaster Department of Civil Engineering (Term 1)
2021 – 2022	Chair, McMaster Department of Civil Engineering, Graduate Affair Committee (Term 1)
2021 – 2022	Chair, McMaster Department of Civil Engineering, Award Committee (Term 1)
2021 – 2022	Member, McMaster Department of Civil Engineering, Chair of the Transportation/Other Systems Curriculum Review Committee (Term 1)
2013 – Present	Co-organizer, McMaster Heavy Construction Annual Industry Night
2013 – Present	Co-Founder and Faculty Advisor McMaster Heavy Construction Internship program
2012 – Present	Co-Founder and Faculty Advisor McMaster Heavy Construction Student Chapter
2020 – 2021	Chair, McMaster Department of Civil Engineering, Chair of the Transportation/Other Systems Curriculum Review Committee
2020 – 2021	Member, McMaster Department of Civil Engineering, Technical Services Committee
2019 – 2020	Member, McMaster Department of Civil Engineering CEAB Committee
2019 – 2020	Member, McMaster Department of Civil Engineering Transportation and Other Systems Curriculum Committee
2019 – 2020	Member, McMaster Department of Civil Engineering Consulting Committee
2018 – 2019	Member, McMaster Department of Civil Engineering Undergraduate Affair Committee
2018 – 2019	Member, McMaster Department of Civil Engineering, Water and Environmental Curriculum Review Committee
2011 – 2019	Member, Heavy Construction Advisory Board
2017 – 2018	Member, McMaster Department of Civil Engineering, Search Committee for the Transportation Faculty Position
2017 – 2018	Member, McMaster Department of Civil Engineering, Search Committee for the Risk and Smart Systems Faculty Position
2016 – 2017	Member, McMaster Department of Civil Engineering CEAB committee
2016 – 2017	Member, McMaster Department of Civil Engineering SGS Chair and Examiner roster committee
2016 – 2017	Member, McMaster Department of Civil Engineering Library Representative
2015 – 2016	Member, Joe NG/JNE Chair Renewal Selection Committee
2015 – 2016	Library Representative, McMaster Department of Civil Engineering
2014 – 2015	Library Representative, McMaster Department of Civil Engineering
2014 – 2015	Member, McMaster Department of Civil Engineering SGS Chair and Examiner
2013 – 2014	Member, McMaster Department of Civil Engineering SGS Chair and Examiner
2013 – 2014	Library Representative McMaster Department of Civil Engineering
2013 – 2014	Member, McMaster Department of Civil Engineering Consulting Committee

Faculty

2024 – 2025	Member, Dean's Standing Committee on Microcredentials, McMaster Faculty of Engineering
2024 – 2025	Instructor Development and Evaluation Committee (IDEC)
2023 – 2025	Member, Ad-Hoc Committee on Thesis Chairs Committee, McMaster Faculty of Engineering
2023 – 2024	Equity and Inclusion Champions, McMaster Faculty of Engineering
2023 – 2024	Instructor Development and Evaluation Committee (IDEC), 2 teaching reviews/observations
2023 – 2024	Department Representative, Faculty of Engineering Graduate Information Session "Coffeehouse"
2022 – 2023	Member, McMaster Software Engineering Selection Committee for **6 faculty positions**
2022 – 2023	Dean's Standing Committee Member, Faculty Committee on Scholarship
2022 – 2023	Instructor Development and Evaluation Committee (IDEC), 3 teaching reviews/observations
2021 – 2022	Selection Committee Member, Tier II Canada Research Chairs, McMaster University
2021 – 2022	Member, Graduate Curriculum and Policy Committee of the Faculty of Engineering (Term 1)
2021 – 2022	Member, Graduate Admission and Studies Committee of the Faculty of Engineering (Term 1)
2021 – 2022	Member, Faculty of Engineering Committee on Scholarship
2020 – 2021	Member, McMaster Engineering Dean's Standing Committee on Equity and Inclusion Facilitator
2020 – 2021	Member, McMaster Engineering Dean's Standing Committee on Student & Professional Affairs Committee
2020 – 2021	Member, McMaster Engineering Dean's Operating Committee on Women in Engineering
2019 – 2020	Member, McMaster School of Engineering Practice Selection Committee for Faculty Member
2019 – 2020	Member, Selection Committee, Director, McMaster Centre for Software Certification (McSCert)
2019 – 2020	Member, McMaster Engineering Search Committee for Associate Dean, Academic
2019 – 2020	Member, McMaster Engineering Dean's Standing Committee on Scholarships
2018 – 2019	Member, McMaster Engineering Dean's Standing Committee on Scholarships
2018 – 2019	Member, McMaster Engineering Search Committee for Associate Dean, Graduate Studies
2017 – 2018	Member, McMaster Faculty of Engineering, Dean's representative on the selection committee for the Don Pether Chair in Engineering Management
2017 – 2018	Member, McMaster Faculty of Engineering, Mock Panel Meeting for one of the Faculty's CFI Innovation Fund proposal
2014 – 2018	Member, McMaster Faculty of Engineering, Dean's Standing Committee on the Future School of Smart Systems Engineering
2015 – 2016	Organizer, MTO-McMaster full-day workshop on Smarter Mobility, Dec. 16, 2015, Ancaster Mill, Ancaster, ON
2015	Organizer, Idea exchange meeting between the researchers at the Faculty of Engineering at McMaster and the Intelligent Transportation Systems Group at the Ministry of Transportation of Ontario, Sep. 15, 2015, Hamilton, ON.
2014 – 2015	Member, McMaster Faculty of Engineering, Dean's Designate Search Committee for the new faculty position in Process System Engineering
2014 – 2015	Facilitator, McMaster Engineering Faculty Retreat session #1 on *the Future School of Smart Systems*
2014 – 2015	Member of organizing team and facilitator of the session on *Corridors of Movement – Gateways of Global Goods Distribution*, McMaster Engineering Faculty – City of Hamilton Workshop on the *Cities of the Future*, Nov. 2014
2014 – 2015	Member, McMaster Faculty of Engineering, Dean's Standing Committee on Undergraduate Recruiting & Admissions
2014 – 2015	Member, McMaster Faculty of Engineering, Dean's Standing Committee of Undergraduate Student Awards
2012 – 2013	Member, McMaster Faculty of Engineering, Dean's Standing Committee of Undergraduate Student Awards
2011 – 2012	Member, McMaster Faculty of Engineering, Dean's operating committee of J. W. Hodgins Lectureship
2011 – 2012	Facilitator, McMaster Engineering Faculty Retreat Outreach Breakout Session, Dec. 2011

University

2023 – 2024	Mentor, Faculty of Engineering Mentorship Program, for two new Computing and Software faculty members
2020 – Present	McMaster Representative and Member, Hamilton Smart City Working Group
2021 – 2023	Member, Campus Roadmap Steering Committee, McMaster University
2020 – 2022	Member of Steering Committee (and the co-founder), Fluid Intelligence: HOPA-McMaster Supply Chain Data Analytics Unit
2017 – 2022	Member, Advisory Board, McMaster Institute for Transportation and Logistics
2020 – 2021	Member, McMaster COVID-19 Research Fund Evaluation Committee
2019 – 2020	BWRI Digital World Group Member for Strategic Research Planning
2018 – 2019	McMaster representative at NRC's "Canada-Netherlands Workshop on Transportation and Intelligent Logistics", Montreal, March 2019.
2018 – 2019	McMaster Representative, Standing Committee for City of Hamilton's Smart Corridor
2018 – 2019	McMaster Representative and Member, Standing Committee for Autonomous Shuttle Acquisition for Hamilton, ON
2018	Facilitator, McMaster University-Region of Saxony joint Workshop on Smart Mobility, Sep. 2018
2013 – 2014	Member, McMaster University President's Advisory Committee on Building an Inclusive Community (PACBIC), Faculty of Engineering representative
2011 – 2012	Organizing Committee Member, the 4th Transportation and Logistics (TRANSLOG) Conference, The McMaster Institute for Transportation and Logistics (MITL)
2011 – 2012	Member, McMaster University, Graduate Valedictorian Selection Committee

OTHER RESPONSIBILITIES

2025 – 2025	Chair, CSCE Whitman Wright Career Award Selection Committee
2025 – 2025	Judge for poster presentations at the 18th Annual Women in Science and Engineering (WISE) National Research Conference (ANRC), "Breaking the Glass Ceiling," at McMaster University, March 2025
2024 – 2025	Member, Board of Advisors of the Doctoral Program in Civil and Industrial Engineering (DICI) of the University of Calabria
2024 – 2024	Track Chair for the Smart Mobility Technology Track, *IEEE International Conference on Smart Mobility2024 (IEEE SM'24),* Niagara Falls, Canada.
2021 – Present	Co-founder and Co-director of McMaster AI-Enhanced Mobility Lab (AeML), supported by CFI-JELF & ORF Grants
2020 – Present	Board of Directors (BOD) member, International Association for Automation and Robotics in Construction (IAARC)
2018 – 2022	Member, YMCA Newcomer Mentorship Program - Career Development Mentors
2020 – 2021	Area Chair (AE), the 2021 International Symposium on Automation and Robotics in Construction (ISARC), Nov 2021, Dubai, U.A.E (online)
2017 – 2020	Member, Transportation Research Board (TRB), Standing Committee on Construction Management
2020 – 2020	Session Chair, 37th International Symposium on Automation and Robotics in Construction (ISARC 2020)
2019	Session Moderator, Smart Freight Symposium, University of Toronto
2011 – 2014	Member, ASCE Education Committee
2011 – 2014	Member, ASCE Data Sensing and Analysis Committee
2011 – 2014	Member, ASCE Body of Knowledge subcommittee in Data Sensing and Analysis
2011 – 2011	Member, 2nd Canadian Student Colloquium, National Research Council of Canada, Poster Award Selection Committee
2011 – 2011	Member, Laborers' International Union of North America-Local 837, Scholarship Selection Committee