

MOHAMMAD NOAEEN

m.noaeen@utoronto.ca

Postdoctoral Fellow, Dalla Lana School of Public Health,
Institute of Health Policy, Management and Evaluation, University of Toronto

RESEARCH INTERESTS

- Health Informatics, Public Health, Environmental Health, Health and Environmental Equity.
- Intelligent Transportation Systems, Traffic Flow Modelling, Ethics in AI & Autonomous Machines.
- Social Media Analysis, Large Language Models, Machine Learning, AI.

EDUCATION

University of Toronto, Canada

Jun 2024 - Present (until May 2025)

Postdoctoral Research Fellow – in Health Data Science

Data Science Institute: <https://datasciences.utoronto.ca/>

Institute of Health Policy, Management and Evaluation, Dalla Lana School of Public Health

Supervisor: Dr. Karim Keshavjee

Domain: Health Data Science

University of Toronto, Canada

Jun 2024 - Present (until Dec 2024)

Research Scientist – in Environmental Health Science

CANUE Lab: <https://canue.ca/leadership-and-staff/>

Dalla Lana School of Public health

Supervisor: Dr. Jeffery Brook

Domain: Health, Transportation, Geography, and Environment

University of Toronto, Canada

Jun 2023 - Present (until May 2025)

Research Scientist – in Health Informatics

Hive Lab: <https://www.hivelab-uoft.ca/>

Institute of Health Policy, Management and Evaluation, Dalla Lana School of Public Health

Supervisor: Zahra Shakeri

Domain: AI in Public Health

University of Toronto, Canada

Jun 2022 - May 2024

Postdoctoral Research Fellow – in Environmental Health Science

CANUE Lab: <https://canue.ca/leadership-and-staff/>

Dalla Lana School of Public health

Supervisor: Dr. Jeffery Brook

Domain: Health, Transportation, and Environment

Harvard Business School, USA

Jan 2022 - May 2023

Postdoctoral Research Affiliate – in Marketing

Ethical Intelligence Lab: <https://www.juliandefreitas.com/people>

Department of Business Administration

Supervisor: Dr. Julian De Freitas

Domain: Ethics, Transparency, and Public Trust in Autonomous Vehicles Development

University of Toronto, Canada*Mar 2021 - Sep 2021*

Postdoctoral Research Fellow – in Transportation Engineering

<https://civmin.utoronto.ca/home/about-us/directory/professors/baher-abdulhai/>

Department of Civil and Mineral Engineering

Supervisors: Dr. Baher Abdulhai and Dr. Scott Sanner

Domain: AI in Traffic Signal Control

University of Calgary, Canada*Sep 2014 - Jan 2021*

Ph.D., Software Engineering

Department of Electrical and Software Engineering

Supervisors: Dr. Behrouz Far and Dr. Mohsen Ramezani

<https://grad.ucalgary.ca/future-students/supervisor/behrouz-far><https://www.sydney.edu.au/engineering/about/our-people/academic-staff/mohsen-ramezani.html>

Domain: AI in Traffic Signal Control

Thesis: Managing urban traffic networks using data analysis, traffic theory, and deep reinforcement learning

Imam Khomeini International University, Iran*Sep 2006 - Sep 2009*

M.Sc., Transportation Engineering

Department of Civil Engineering

Supervisor: Dr. Amir Abbas Rassafi

Domain: Traffic Signal Control

Thesis: Traffic flow analysis in signalized intersections using shockwave theory

PUBLICATIONS

Under Review

1. Prakesh S Shah, Alice Aveline, Nicole Bando, **Mohammad Noaen**, Jessica Yang, Thuy Mai Luu, Marc Beltempo, Abhay Lodha, Jeffrey R Brook. "Maternal exposure to environmental greenness, air pollution and temperature and neonatal outcomes of preterms", Pediatric Academic Societies (PAS), 2025.
2. Dany Doiron, Eleanor M. Setton, Joey Syer, **Mohammad Noaen**, Priya Patel, Jeffrey R. Brook. "HealthyPlan.City: Democratizing Environmental Exposure Data for Healthy, Equitable and Sustainable Communities", International Society of Exposure Science (ISES) Annual Meeting, 2024.
3. **Mohammad Noaen**, Ibrahim Ghanem, AmirHosein Rostami, Jeffrey R. Brook, and Zahra Shakeri Hossein Abad. "NeDiaML–Neighborhood-level Diabetes Prevalence Prediction: A Machine Learning Pipeline with Evidence from Causal Forests.", Journal of NPJ digital medicine, 2024.
4. Omid Jafarinezhad, Qian Zhang, Ryan Rezai, **Mohammad Noaen**, and Zahra Shakeri. "Collaborative Dynamics in Patient-Level Data Sharing and AI-Driven Healthcare Research.", Journal of NPJ digital medicine, 2024.
5. Konrad Samsel, Aria Panchal, Dareen Christabel, Neil Seeman, **Mohammad Noaen**, and Zahra Shakeri. "Shaping a Responsible Online Gambling Era with AI.", Journal of PLOS Digital Health, 2024.

Published/Accepted

1. **Mohammad Noaen**, Dany Doiron, Joey Syer, Jeffrey Brook. "Advancing Population Health Through Open Environmental Data Platforms", Current Topics in Behavioral Neurosciences, Springer, 2024
2. Katherine Lu, Paijani Sheth, Zhi Lin Zhou, Kamyar Kazari, Aziz Guergachi, Karim Keshavjee, **Mohammad Noaen**, and Zahra Shakeri Hossein Abad. "Identifying Prediabetes in Canadian Populations Using Machine Learning.", the 46th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Orlando, Florida, USA, 2024. [Accepted]
3. Chelsea Tanchip, **Mohammad Noaen**, Kamyar Kazari, Zahra Shakeri Hossein Abad. "Using Machine Learning to Predict Donor Selection for Organ Transplantation.", the 46th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Orlando, Florida, USA, 2024. [Accepted]
4. Kayla Esser, Monica Duong, Khalil Kain, Son Tran, Aryan Sadeghi, Aziz Guergachi, Karim Keshavjee, **Mohammad Noaen**, and Zahra Shakeri Hossein Abad. "Predicting Diabetes Prevalence in Canadian Adults Using Machine Learning.", the 46th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Orlando, Florida, USA, 2024. [Accepted]
5. Priyonto Saha, Yacine Marouf, Hunter Pozzebon, **Mohammad Noaen**, Aziz Guergachi, Karim Keshavjee, and Zahra Shakeri Hossein Abad. "Predicting the Time to Diabetes Onset Based on Metabolic Biomarker Levels and Comorbidities.", the 46th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Orlando, Florida, USA, 2024. [Accepted]
6. Konrad Samsel, Amrit Tiwana, Sarra Ali, Aryan Sadeghi, Aziz Guergachi, Karim Keshavjee, **Mohammad Noaen**, and Zahra Shakeri Hossein Abad. "Predicting Depression Among Canadians At-Risk or Living with Diabetes Using Machine Learning.", the 46th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Orlando, Florida, USA, 2024. [Accepted]
7. Dany Doiron, Eleanor M Setton, Joey Syer, Andre Redivo, Allan McKee, **Mohammad Noaen**, Priya Patel, Gillian L Booth, Michael Brauer, Daniel Fuller, Yan Kestens, Laura C Rosella, Dave Stieb, Paul Villeneuve, Jeffrey R Brook. "HealthyPlan.City: A Web Tool to Support Urban Environmental Equity and Public Health in Canadian Communities.", Journal of Urban Health, 2024 [IF = 6.6].
8. **Mohammad Noaen**, Somayeh Amini, Shveta Bhasker, Zohreh Ghezelsefli, Aisha Ahmed, Omid Jafarinezhad, and Zahra Shakeri Hossein Abad. "Unlocking the Power of EHRs: Harnessing Unstructured Data for Machine Learning-based Outcome Predictions.", the 45th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Sydney, Australia, 2023.
9. Li, Xiaocan, Ray Coden Mercurius, Ayal Taitler, Xiaoyu Wang, **Mohammad Noaen**, Scott Sanner, and Baher Abdulhai. "Perimeter Control Using Deep Reinforcement Learning: A Model-free Approach towards Homogeneous Flow Rate Optimization.", the IEEE Intelligent Transportation Systems Conference (ITSC), Bilbao, Spain, 2023.
10. **Mohammad Noaen**, Atharva Naik, Liana Goodman, Jared Crebo, Taimoor Abrar, Zahra Shakeri Hossein Abad, Behrouz H. Far, and Ana L. C. Bazzan. "Reinforcement Learning in Urban Network Traffic Signal Control: A Systematic Literature Review.", Journal of Expert Systems With Applications, 2022 [IF = 8.5].
11. **Mohammad Noaen**, Reza Mohajerpour, Behrouz H. Far, and Mohsen Ramezani. "Real-time Decentralized Traffic Signal Control for Congested Urban Networks Considering Queue Spillbacks.", Journal of Transportation Research Part C: Emerging Technologies 133, 103407, 2021

[IF = 8.3].

12. **Mohammad Noaen**, Behrouz H. Far, and Mohsen Ramezani. “Bi-modal Perimeter Control: A Hybrid Control Approach Integrating Proportional Integral Controller and Deep Reinforcement Learning.”, *Journal of IEEE Transactions on Intelligent Transportation Systems*, 2021 [Preprint, IF = 6.492].
13. Zahra Shakeri Hossein Abad, Adrienne Kline, Madeena Sultana, **Mohammad Noaen**, Elvira Nurmambetova, Filipe Lucini, Majed Al-Jefri, and Joon Lee. “Digital Public Health Surveillance: A Systematic Scoping Review.”, *NPJ digital medicine* 4, no. 1, 2021: 1-13. [IF = 15.2].
14. **Mohammad Noaen**, and Behrouz H. Far. “The Efficacy of Using Social Media Data for Designing Traffic Management Systems.” *The IEEE 28th International Requirements Engineering Conference Workshops (REW)*, 2020.
15. **Mohammad Noaen**, and Behrouz H. Far. “Social Media Analysis for Traffic Management.” *Proceedings of the 14th International Conference on Global Software Engineering*. IEEE Press, 2019.
16. **Mohammad Noaen**, Zahra Shakeri Hossein Abad, Guenther Ruhe, and Behrouz H. Far (2018). “Transportation Engineering on Social Question and Answer Websites: An Empirical Case Study”. In *Highlighting the Importance of Big Data Management and Analysis for Various Applications* (pp. 117-139). Springer, Cham.
17. Zahra Shakeri Hossein Abad, **Mohammad Noaen**, Didar Zowghi, Behrouz H. Far, and Ken Barker. “Two Sides of the Same Coin: Software Developers’ Perceptions of Task Switching and Task Interruption.” *Proceedings of the 22nd International Conference on Evaluation and Assessment in Software Engineering 2018*. ACM, 2018.
18. **Mohammad Noaen**, Zahra Shakeri Hossein Abad, and Behrouz H. Far (2017). “Let’s Hear It From RETTA: A Requirements Elicitation Tool For Traffic Management Systems”. *The 35th IEEE International Conference on Requirements Engineering (RE)*. IEEE, Lisbon, Portugal, 2017.
19. **Mohammad Noaen**, Amir Abbas Rassafi, and Behrouz H. Far. “Traffic Signal Timing Optimization by Modelling the Lost Time Effect in the Shock Wave Delay Model”. *ASCE International Conference on Transportation & Development (ICTD2016)*, Houston, Texas, US. American Society of Civil Engineers (ASCE), 2016.
20. Zahra Shakeri Hossein Abad, **Mohammad Noaen**, and Guenther Ruhe. “Requirements Engineering Visualization: A Systematic Literature Review”. In *Requirements Engineering Conference (RE)*, 2016 IEEE 24th International (pp.6-15).
21. **Mohammad Noaen**, Amir Abbas Rassafi, and Behrouz H. Far (2016). “Exploring the Residual Queue Length Equation in the Shock Wave Model”. *51st Annual CTRF Conference, Canadian Transportation Research Forum*, Toronto, Ontario, Canada, 2016.

Magazines and Technical Reports

1. Matthew Palm, Siobhan Teel, Ignacio Tiznado-Aitken, Anastasia Soukhov, Antonio Paez, Steven Farber, and Michael Hain. “Developing Data Driven Equity Standards: Stakeholder Perspectives.”, Technical Report, *Participation in the Mobilizing Justice Report*, May, 2023. Available online at: (https://mobilizingjustice.ca/wp-content/uploads/2023/06/Developing_Data_Driven_Standards_FINAL_2023_06_06.pdf).
2. **Mohammad Noaen**, Joe McFarland. “Can Artificial Intelligence and Social Media Help Relieve Traffic Gridlock?”, Invited interview, *UToday*, Schulich School of Engineering, University of Calgary, July 16, 2021. Available online at: (<https://schulich.ucalgary.ca/news/artificial-intelligence-social-media-data-help-ease-traffic-headaches>)

3. **Mohammad Noaen**, Behrouz H. Far, Mohsen Ramezani. “Real-Time Signal Control for Urban Networks”, In Canadian Civil Engineer Magazine, Intelligent Transportation Systems (pp. 28-29). Available online at: (https://csce.ca/wp-content/uploads/2018/06/Civil_Winter2017_LAZ_low_.pdf)

PRESENTATIONS AND TALKS

Guest Lecturer

1. **Mohammad Noaen**. “HealthyPlan.City: A Web Tool to Support Urban Environmental Equity and Public Health in Canadian Communities.”, Guest Lecturer in Jeffrey Brook’s Course, January 30, 2024.

Presentations

1. **Mohammad Noaen**, and Jeffrey R. Brook. “Reducing Traffic Congestion with Machine Learning: Exploring an Environmental Justice Approach.”, Emerging Mobility Scholars Conference (EMSC 2023), June 22, 2023.
2. **Mohammad Noaen**, Somayeh Amini, Shveta Bhasker, Zohreh Ghezelsefli, Aisha Ahmed, Omid Jafarinezhad, and Zahra Shakeri Hossein Abad. “Unlocking the Power of EHRs: Harnessing Unstructured Data for Machine Learning-based Outcome Predictions.”, the 45th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Sydney, Australia, 2023.
3. **Mohammad Noaen**, and Behrouz H. Far. “The Efficacy of Using Social Media Data for Designing Traffic Management Systems.” The IEEE 28th International Requirements Engineering Conference Workshops (REW), 2020.
4. **Mohammad Noaen**, and Behrouz H. Far. “Social media analysis for traffic management.” Proceedings of the 14th International Conference on Global Software Engineering. IEEE Press, 2019.
5. **Mohammad Noaen**, Zahra Shakeri Hossein Abad, Guenther Ruhe, and Behrouz H. Far (2018). “Transportation Engineering on Social Question and Answer Websites: An Empirical Case Study”. In Highlighting the Importance of Big Data Management and Analysis for Various Applications (pp. 117-139).
6. **Mohammad Noaen**, Zahra Shakeri Hossein Abad, and Behrouz H. Far (2017). “Let’s Hear It From RETTA: A Requirements Elicitation Tool For Traffic Management Systems”. The 35th IEEE International Conference on Requirements Engineering (RE). IEEE, Lisbon, Portugal, 2017.
7. **Mohammad Noaen**, Amir Abbas Rassafi, and Behrouz H. Far. “Traffic Signal Timing Optimization by Modelling the Lost Time Effect in the Shock Wave Delay Model”. ASCE International Conference on Transportation & Development (ICTD2016), Houston, Texas, US. American Society of Civil Engineers (ASCE), 2016.
8. **Mohammad Noaen**, Amir Abbas Rassafi, and Behrouz H. Far (2016). “Exploring the Residual Queue Length Equation in the Shock Wave Model”. 51st Annual CTRF Conference, Canadian Transportation Research Forum, Toronto, Ontario, Canada, 2016.

Training Workshop

1. **Mohammad Noaen**, Mobility Network Summer School 2023 ‘Measure what matters: Urban mobility in an era of climate emergency’, University of Toronto, Toronto, Canada, June 20-21, 2023. [A two-day training workshop to develop a roadmap for evaluating government investment in transportation infrastructure.]

TEACHING EXPERIENCE & CERTIFICATES

Laboratory Instructor

- ENGG 225 Fundamentals of Electrical Circuits and Machines *Winter 2020*
Schulich School of Engineering, University of Calgary

Sessional Instructor

- ENGG 233 Computing For Engineers *Fall 2019*
Schulich School of Engineering, University of Calgary

- Road and Building Construction Machines *Summer 2012*
Department of Civil Engineering, University of Ahrar

Mentorship

- MHI-2002 Emergent Topics in Health Informatics *Fall 2024*
Institute of Health Policy, Management, and Evaluation, University of Toronto

Teaching Assistant

Department of Electrical and Computer Engineering, University of Calgary *Fall 2014-2020*

- ENGG-233 Computing for Engineers *Fall 2014, 2016, 2020*

- SENG-637 Dependability and Reliability of Software Systems *Summer 2019, 2020*

- ENEL-645 Data Mining and Knowledge Discovery *Spring 2019*

- ENSF-619.25 Machine Learning for Engineering Students *Winter 2019*

- ENSF-619.30 Software Requirements Analysis and Process Management *Fall 2017, 2018*

- ENSF-480 Principles of Software Design *Fall 2018*

- ENGG-225 Fundamentals of Electrical Circuits and Machines *Winter 2015-2018*

- ENGG-502 Senior Capstone Design Project *Fall 2017, Winter 2018*

- ENEL-500 Computer, Electrical, and Software Engineering Team Design *Winter 2018*

- ENGG-501 Senior Capstone Design Project *Fall 2017*

- ENGG-209 Engineering Economics *Fall 2014, 2015*

Learning Assistant

Devon Academic Resource Centre, Schulich School of Eng., University of Calgary *Fall 2015- Winter 2016*

- ENGG-202 Engineering Statics *Winter 2016*

- ENGG-317 Mechanics of Solids *Winter 2016*

- ENGG-233 Computing for Engineers *Fall 2015*

- Math-275 Calculus for Engineers and Scientists *Fall 2015*

- Math-211 Linear Methods I *Fall 2015*

Graduate Student Teaching Development (GSTD) Certificate

Educational Development Unit, University of Calgary *Sep 2015*

Instructional Skills Certificate

Educational Development Unit, University of Calgary *April 2015*

RESEARCH FUNDINGS

Grant Proposal Submissions

1. Gillian Booth, Jeffrey Brook, David Campbell, Kaberi Dasgupta, Ghazal Fazli, Calvin Ke, Rahim Moineddin, **Mohammad Noaen**, Laura Rosella. "Community resilience and diabetes incidence following the pandemic: A comparative analysis of Canadian cities", CIHR HCRI Data Analysis Using Existing Databases and Cohorts Grant, Nov 2024.
2. Ashwin Sankar, Andrea Gershon, Jeffrey Brook, Greg Evans, Chung-Wai Chow, Jeremy Scott, Jue Wang, **Mohammad Noaen**, Nancy Baxter, Duminda Wijesundera, Therese Stukel. "The

Air quality and Environmental impact on Recovery Outcomes after Surgery (AEROS)”, CIHR Catalyst grant, Oct 2024.

3. Jeffrey Brook, Dany Doiron, Joey Syer, **Mohammad Noaen**. “Development of Technical Guidance to Advance Heat-health Vulnerability Maps in Canada”, Standards Council of Canada, Nov 2023.
4. Jeffrey Brook, **Mohammad Noaen**, Dany Doiron, Joey Syer. “HealthyToronto.City: Advancing Climate Change Vulnerability Assessment in Toronto via Analytical Hierarchy Process and Machine Learning Techniques”, Ontario Collaborative Innovation Platform, The city of Toronto, CivicLabTO Research, Sep 2023.
5. Samar Sabie, Ted Kesik, Seungjae Lee, **Mohammad Noaen**. “Identifying Workforce Development Requirements for Prefabricated Home Overcladding Services in Toronto through a Tri-Method Approach”, Ontario Collaborative Innovation Platform, The city of Toronto, CivicLabTO Research, Sep 2023.

PROFESSIONAL EXPERIENCE

Research Assistant

<i>Institute of Health Policy, Management and Evaluation, DLSPH</i>	<i>June 2023- Present</i>
<i>Dalla Lana School of Public Health, University of Toronto</i>	<i>June 2022- Present</i>
<i>Harvard Business School, Marketing Unit, Harvard University</i>	<i>Jan 2022- Present</i>
<i>Department of Civil and Mineral Engineering, University of Toronto</i>	<i>Mar 2021- Sep 2021</i>
<i>School of Civil Engineering, Transport Engineering, University of Sydney</i>	<i>Sep 2021- Dec 2021</i>
<i>Department of Electrical and Computer Engineering, University of Calgary</i>	<i>Sep 2014- Dec 2020</i>
<i>Department of Civil Engineering, Imam Khomeini International University</i>	<i>Sep 2006- Sep 2009</i>

Supervision and Mentoring

<i>IHPME, DLSPH, University of Toronto</i> Katherine Lu, Pajani Sheth, Zhi Lin Zhou (MSc students) “ML for Identifying Prediabetes”	<i>Nov 2023- Mar 2024</i>
<i>IHPME, DLSPH, University of Toronto</i> Chelsea Tanchip (MSc student) “ML for Predicting Donor Selection”	<i>Nov 2023- Mar 2024</i>
<i>IHPME, DLSPH, University of Toronto</i> Kayla Esser, Monica Duong, Khalil Kain, Son Tran (MSc student) “ML for Predicting Diabetes Prevalence”	<i>Nov 2023- Mar 2024</i>
<i>IHPME, DLSPH, University of Toronto</i> Priyonto Saha, Yacine Marouf, Hunter Pozzebon (MSc student) “ML for Predicting the Time to Diabetes Onset”	<i>Nov 2023- Mar 2024</i>
<i>IHPME, DLSPH, University of Toronto</i> Konrad Samsel, Amrit Tiwana, Sarra Ali (MSc student) “ML for Predicting Depression”	<i>Nov 2023- Mar 2024</i>
<i>Department of Civil and Mineral Engineering, University of Toronto</i> Xiaocan Li (Ph.D. student) “Perimeter Control Using Deep Reinforcement Learning”	<i>Nov 2021- Mar 2023</i>
<i>Department of Electrical and Computer Engineering, University of Calgary</i> Saad Khurshid (Undergraduate student) “A Lane-based Traffic Signal Control Strategy for Emergency Vehicle Preemption in a Connected Vehicle Environment”	<i>May 2015- Sep 2015</i>

Department of Electrical and Computer Engineering, University of Calgary Jan 2020- Dec 2020
Atharva Naik, Liana Goodman, Jared Crebo, Taimoor Abrar (Undergraduate students)
“Reinforcement Learning in Urban Network Traffic Signal Control”

Designer, Project Manager, Superintendent, Supervisor, and CEO Jul 2003- Feb 2013

Sakht-o-Saz Mehr Construction Company, Iran

Construction: 15 projects, including residential, industrial, and educational buildings, roads, and bridges.

Design and Supervision: 5 buildings

Development Skills

Programming and Scripting Languages - *Python, R, Java, Processing*

Database Tools - *NoSQL, SQL (PostgreSQL, MongoDB)*

Geo-Spatial Tools - *ArcGIS*

Operating Systems - *Linux, MacOS, Microsoft Windows*

Traffic Simulation - *Aimsun, Vissim, Sumo*

Engineering and Visualization Tools - *Tableau, Matlab, Maple, Sap, Safe, AutoCAD (2d/3d)*

PROFESSIONAL SERVICE

Leadership and Academic Services (Volunteer)

Member of Mobility Network Postdoctoral Community of Practice *Dec 2022- Present*
Mobility Network, University of Toronto

Selected to serve as the Student Volunteer *Sep 2017*
The 25th IEEE International Requirements Engineering Conference, Lisbon, Portugal

Member of Computer Science Teaching and Learning (CSTL) Forum *Sep 2016- Aug 2017*
Department of Computer Science, University of Calgary

Facilitator of the boot camp writing sessions for graduate students *Jun 2016- Jun 2017*
Student Success Centre (SSC), University of Calgary

Member of Graduate Students Association (GSA) award committee *Sep 2016- Sep 2017*
Faculty of Graduate Studies, University of Calgary

Graduate Student Representative, Schulich Student Activity Fund Committee *Oct 2016- Oct 2017*
Schulich School of Engineering, University of Calgary

Vice President-Finance of Electrical and Computer Eng. Graduate Students *Apr 2015- Apr 2016*
Department of Electrical and Computer Engineering, University of Calgary

Graduate Student Representative, Schulich Student Activity Fund Committee *Apr 2015- Apr 2016*
Schulich School of Engineering, University of Calgary

Event-Based Volunteer, Persian Gulf Club Charity Foundation *Apr 2014- Apr 2016*
University of Calgary

Member of the Organizing Committee of Intelligent Data Analytic Workshop 2015 *Mar 2015*
Department of Electrical and Computer Engineering, University of Calgary

Vice President-External, Electrical, and Computer Eng. Graduate Students *Jan 2015- Apr 2015*
Department of Electrical and Computer Engineering, University of Calgary

Technical Program Committee and Reviewer

<i>The Lancet Planetary Health journal</i> (Reviewer)	2024
<i>The IEEE Intelligent Transportation Systems Conference (ITSC)</i> (Reviewer)	2023, 2024
<i>The IET Intelligent Transport Systems</i> (Reviewer)	2023, 2024
<i>Journal of Environmental Science and Technology</i> (Reviewer)	2023, 2024
<i>Journal of Expert Systems with Applications</i> (Reviewer)	2022, 2023, 2024
<i>IEEE Transactions on Intelligent Transportation Systems</i> (Reviewer)	2018, 2019, 2022, 2024
<i>Journal of Traffic and Transportation Engineering (English Edition)</i> (Reviewer)	2022
<i>The IEEE Intelligent Transportation Systems Society Conference</i> (Reviewer)	2022
<i>The 12th International Workshop of Agents in Traffic and Transportation</i> (Committee Member & Reviewer)	2022

HONOURS AND AWARDS

- AI for Public Health (AI4PH) Postdoctoral Scholarship Award, Canada	Aug 2024
- Data Science Institute Postdoctoral Fellowship Award, Canada	Jun 2024
- BeSpatial Ontario award, 2024 Best Innovation in GIS Award, Canada (CANUE Team)	May 2024
- Google Earth's Geo for Good Impact Award, Canada (CANUE Team)	May 2024
- GSA's Excellence in Teaching Award, University of Calgary, Canada	Apr 2020
- Eberlein Systems Dynamics Graduate Scholarship, Alberta, Canada	Jan 2020
- ECE Research Productivity Award, University of Calgary, Canada	Apr 2016, 2017, 2018
- Eberlein Systems Dynamics Graduate Scholarship, Alberta, Canada	Sep 2018
- IEEE RE'17 Best Tool Demonstration Award, Lisbon, Portugal	Sep 2017
- Vanier Scholarship finalist, University of Calgary, Canada	Sep 2016
- MSc Graduate Excellence Award, University of Calgary, Canada	Apr 2016
- Schulich Student Activities Fund (SSAF) Award, University of Calgary, Canada	Apr 2016
- Ranked Top 2% in the National University-Entrance Exam (MSc), Iran	2006
- Member of the National Organization for Development of Exceptional Talents (NODET), Iran	1994-2001

CITIZENSHIP

- Canadian Citizen
- Iranian

REFERENCES

Dr. Behrouz H. Far

Professor of Computer Engineering
Dept. of Electrical and Computer Engineering
University of Calgary, Canada
Phone: +1 (403) 210-5411
Email: far@ucalgary.ca

Dr. Jeffrey R. Brook

Associate Professor of Environmental Health
Dalla Lana School of Public Health
University of Toronto, Canada
Phone: +1 (416) 978-5883
Email: jeff.brook@utoronto.ca

Dr. Ahmad Radmanesh

Adjunct Professor of Electrical Engineering
Dept. of Electrical and Computer Engineering
University of Calgary, Canada
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Dr. Karim Keshavjee

Assistant Professor of Health Informatics
Inst. of Health Policy, Management and Evaluation
University of Toronto, Canada
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Dr. Mohsen Ramezani

Associate Professor of Transportation Engineering
School of Civil Engineering
University of Sydney, Australia
Phone: +61 2 9351 2119
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Dr. Julian de Freitas

Assistant Professor of Marketing and Business
Harvard Business School
Harvard University, USA
Phone: +1 (617) 495-4944
Email: jdefreitas@hbs.edu

Dr. Dany Doiron

Research Associate of Environmental Epidemiology
Respiratory Epidemiology and Clinical Research Unit
McGill University Health Centre, Canada
Phone: +1 (416) 978-5883
Email: dany.doiron@canue.ca