

Date submitted or updated: 4 June 2025

Faculty Information

Full Name	Seyed Ali Nasser
Date of First Appointment at University Canada West	29 March 2025
Hire Year, Term and Month	2025, Winter 2025, March
Appointment type	Continuing faculty

Educational & Professional Certifications/Designations

Education & Degrees (list all degrees obtained)

Date	Degree	Institution	Specialization or Major
Jun 2018 – May 2019	MBA	Quantic School of Business and Technology	Business Administration
Sep 2014 – Jun 2018	PhD	Politecnico di Torino	Physics
Sep 2010 – Nov 2013	MASc.	University of Toronto	Aerospace Science and Engineering
Sep 2006 – Sep 2010	BSc.	K. N. Toosi University of Technology	Aerospace Engineering

Professional Memberships

Date	Membership	Organization	Current (Yes/No)	In Good Standing (Yes/No)
Jan 2014 - present	Member	Project Management Institute (PMI)	Yes	Yes
Aug 2024 - present	Member	International Council on Systems Engineering (INCOSE)	Yes	Yes

Professional Certifications

Date	Certificate	Organization/ Institution	Specialization
Jan 2014 – Jan 2029	Project Management Professional (PMP)	Project Management Institute (PMI)	Project Management
Aug 2024 - Aug 2029	Associate Systems Engineering Professional (ASEP)	International Council on Systems Engineering (INCOSE)	Systems Engineering
Jun 2019	Small Remotely Piloted Aircraft System (RPAS), Visual line-of-sight (VLOS)	Transport Canada	

Employment History

Work Experience (Academic and non-academic)

Dates (start-end)	Job Title & Company	Job Responsibility
Mar 2025 - present	Associate Professor, University Canada West	Teaching and research on project management
Feb 2020 - present	Founder and CEO, Xplorspace Inc	Day to day operations of the company
Sep 2024 – Mar 2025	Assistant Professor - Teaching Stream, University of Waterloo	Teaching Science and Business courses, advising students
Aug 2023- Sep 2024	Lecturer, University of Waterloo	Teaching Science and Business courses, advising students
Jun 2024 – Aug 2024	Sessional Lecturer, University of Toronto	Taught PHY 132 Introduction to Physics II
Sep 2023 – Dec 2023	Writing Instructor, University of Toronto	Supported APS 111 Engineering Strategies and Practices I
Jul 2022 – Aug 2023	Engineer, Engineering Capability Development, Canadian Space Agency	Supported project management and safety and mission assurance on various project including Canadarm3, Canadian Cubesat project, Lunar Rover Mission
Jan 2023 – Apr 2023	Contract Lecturer, School of Continuing Studies, McGill University	Taught YCBS 276 Innovation and Creativity for Entrepreneurs
Nov 2019 – Dec 2022	Executive research Coordinator and Programming Languages for Artificial Intelligence (PLAI) Group Manager, University of British Columbia	Managed large research collaborations, built new research collaborations, developed grant applications particularly AI and machine learning, and acted as the director of research partnerships for computer science
Mar 2014 – Jul 2022	Expert, Space Technology and Telecommunications Cluster, Skolkovo Foundation	Reviewed grant applications for support from the foundation
Jan 2022 – Jun 2022	Sessional Lecturer, Physics and Astronomy, University of British Columbia	Taught PHYS 158 Introductory Physics for Engineers II and PHYS 131 Energy and Waves
Jul 2021 – Aug 2022	Instructor and Engineering Program Coordinator, Selkirk College	Developed and delivered Engineering Design and Communication I and II, student advising, managed curriculum development and student transfer
Sep 2018 – Oct 2018	Entrepreneur in Residence, TandemLaunch Inc	Developed the concept of a new venture and an app to control a robot
Sep 2014 – Sep 2017	Early-Stage Researcher, ISI Foundation	Performed research on magnetic domain walls under the European Marie Skłodowska-Curie Actions (MSCA) Initial Training Network (ITN) WALL

Dates (start-end)	Job Title & Company	Job Responsibility
Sep 2010 – Apr 2013	Teaching Assistant, University of Toronto	TAed AER 406 Aircraft design (2011-2012) and APS 112 (2013)
Sep 2012 – Oct 2012	Industrial Design Graduate Enterprise Intern, Kajotec Inc.	Design novel products to promote sustainable development
Sep 2010 – Aug 2012	Research Assistant, master's Level, Institute for Aerospace Studies, University of Toronto	Performed research to develop surrogate mixtures for aerospace fuels

Leaves of Absence

Dates (start-end)	Notes
May 2025	Parental leave for birth of my first child

Consulting, including Industry Engagement

Date	Company	Project Responsibilities
Sept 2014 - present	Consultant, Seyed Ali Nasseri	Business and technical consulting services
Sep 2024 – Aug 2025	Instructor, MITACS Invention and Innovation (I2I) program, Simon Fraser University	Teach an online course focused on Opportunity identification, customer validation and product-market fit
Jan 2024 – Oct 2024	Research Fellow, Open Lunar Foundation	Conceptualized and led the Lunar Accidents, Incidents and Issues Reporting Systems (LAIIRS)
Aug 2019 – Jul 2022	Director of Engineering, LDC Solutions	Supported proposal development and recruitment for engineering and science focused projects
Sep 2020 – Sep 2021	Implementation Support Officer, Moon Village Association	Created the infrastructure and strategy for the growth of the nonprofit
Oct 2019 – Mar 2020	Managing Editor, 2020 Autonomous Vehicle Technical Report, Wevolver	Led a team of writers to develop the report
Jul 2011 – Aug 2019	Instructor, Engineering Outreach Office, University of Toronto	Developed and taught various hands-on STEM courses presenting University research and teaching to high school students
Jan 2019 – Aug 2019	Aerospace Consultant, Defence Research and Development Canada (under contract to LDC Solutions)	Developed computer aided models of drones for failure and lethality analysis
Jan 2007 – Aug 2010	Undergraduate Research Assistant, Space Launch Research Center (Previously MDO Lab, K. N. Toosi University of Technology)	Developed optimization algorithms and system models
Jan 2010 – Aug 2010 Jun 2009 – Aug 2009	Undergraduate Project (thesis) Researcher, Space Systems Research Center, K. N. Toosi University of Technology	Developed system models

Scholarly & Industry Honours and Awards

Honours & Awards

Date	Honour or Award	Awarding Body
Mar 2022	Director General's Award for supporting NASA SpaceApps 2022	Canadian Space Agency
Jul 2022	Service Award for Supporting Research	UBC Computer Science
Mar 2020	Distinguished Service Award (DSA)	International Astronautical Federation
Jun 2019	Micro Travel Grant	Marie Curie Alumni Association (MCAA)
Sep 2018	IAF Young Space Leader (YSL) Award	International Astronautical Federation
Sep 2018	One World Micro Grant	Marie Curie Alumni Association (MCAA)
Sep 2014 – Sep 2017	Early-Stage Researcher fellowship	EU Commission funded Marie Curie ITN WALL, ISI Foundation
Sep 2017	IAF Luigi G. Napolitano Award Finalist	International Astronautical Federation
Aug 2016	Best Early Career presentation at JEMS 2016	Institute of Physics (IOP)
Oct 2014	Member of the Month (as part of the SGC 2014 Local Organizing Committee)	Space Generation Advisory Council
Jun – Aug 2014	European Space Agency and the Heinlein Prize Trust Scholarship	International Space University
Jun 2013	Graduate Student Program representing Canada at the 21st PECC Meeting and the Canada-Asia 2013 conference	Pacific Economic Cooperation Council (PECC) and MITACS
Dec 2013	Member of the Month	Space Generation Advisory Council
Dec 2013	Emerging Space Leaders Grantee	International Astronautical Federation
May 2013	SGAC-IAASS Paper Competition for the 6th IAASS Conference	SGAC and the International Association for the Advancement of Space Safety,
Sep 2012	SGAC Young Leadership Award	Space Generation Advisory Council
Apr 2012	2nd place, best presentation	2nd Annual Procept-AACE-University of Toronto Project Management Paper Competition,
Sep 2010 – Sep 2012	U. of T. Fellowship for MASc. Studies	University of Toronto Institute for Aerospace Studies,
Oct 2011	CSA Travel grant	Canadian Space Agency
Nov 2009	Training Grant	Space Systems Research Center (SSRC), K. N. Toosi University of Technology

Teaching Responsibilities

UCW Teaching History

Dates (start-end)	Course Code	Course Name	Credits
Jul 2025 – Sep 2025	MGMT 640	Project Management	3.0

Teaching At Other Institutions

Dates (start-end)	Institution	Course Code	Course Name	Credits
Sep 2024 - Dec 2024	Simon Fraser University (Invention 2 Innovation Program)	I2I	Opportunity Identification and Assessment	-
Sep 2024 - Dec 2024	University of Waterloo	SCBUS 323	Technology Development	0.5
Jul 2024 - Aug 2024	University of Toronto	PHY 132	Introduction to Physics 2	0.5
Jan 2024 - Apr 2024	University of Waterloo	SCBUS 122	Management of Business Organizations	0.5
Jan 2024 - Apr 2024	University of Waterloo	SCBUS 225	Organizational Behaviour in Scientific and Technical Workplaces	0.5
Sep 2023 - Dec 2023	University of Waterloo	SCBUS 323	Technology Development	0.5
Sep 2023 - Dec 2023	University of Toronto	APS 111	Engineering Strategies and Practices I	0.5
May 2023 - Jul 2023*	University of Sherbrooke	GMC 791	Etude de cas en genie aerospacial	-
May 2023 - Jun 2022	The University of British Columbia	PHYS 131	Energy and Waves	3
Jan 2023 - Apr 2022	The University of British Columbia	PHYS 158	Introductory Physics for Engineers II	3
Jan 2023 – Apr 2022	Selkirk College	ENGR 101	Engineering Design and Communication II	3
Sep 2023 – Dec 2021	Selkirk College	ENGR 100	Engineering Design and Communication I	3

* Co-taught with CSA colleagues

Undergraduate & Graduate Supervision at Other Institutions

Date	Name	Project
Sep 2023 – Mar 2025	Innosolve Student Team	I created this team, which included 15+ students working on 4+ commercialization and research projects. I specifically mentored wildfire prediction system (later incubated as Firebird), materials for protection against space radiation, and a grocery budget optimization app.

Date	Name	Project
Jan – Apr 2023	APSC-103 Capstone Project, Queens University	Release mechanism concept design for the PEEKBot lunar rover
Sep 2022 – Apr 2023	Dust Mitigation Capstone Project (fourth year), Ecole Polytechnique de Montreal	Dust removal mechanism design for the PEEKBOT lunar rover radiator
Sep 2018 – Dec 2018	Arielle Ainabe	Development of a nanocomposite based on Boron Nitride Nanotubes (BNNT) for radiation protection in space
Sep 2018 - Dec 2018	Gal Meartsi	Analysis of Space Suite Subsystems
Sep 2016 - Dec 2016	Adrianna van Brenen	Applications of Lunar and Martian soil
May 2016 - Aug 2016	Anna Vanderveen, and Yasmine El-Bakri	Why is radiotherapy less available to developing countries, and how can we fix this issue?

Other Teaching Activities

Other Teaching Activities

Date	Activity	Description
Apr 2024 - Aug 2024	Curriculum renewal for the Science and Business Program	Created an expanded list of electives, and made the SCBUS spline of courses more coordinated
Apr 2024 - Aug 2024	Redesigned SCBUS 323: Technology Development	Focused the course onto product design and development, creating a framework which helped students through the course
Dec 2023 – Apr 2024	Redesigned SCBUS 122: Management of Business Organizations	Course was redesigned with the focus of the first half on project management and second half on general principles of management and strategy
Dec 2023 – Apr 2024	Redesigned SCBUS 225: Organizational Behaviour in Scientific and Technical Workplaces	Course was redesigned to use a case-based approach, and emphasize business ethics alongside organizational behaviour
May 2020 – Dec 2022	University of British Columbia	Created the Advanced Machine Learning Training Network (AML-TN) concept, which was funded by NSERC CREATE in 2023
Sep 2021 – Jul 2022	Served on the BCCAT Engineering Articulation committee	Represented Selkirk College, and engaged on the implementation of the Common First-Year Engineering Curriculum (CFYEC)
Jan 2022 - Apr 2022	Second year engineering transfer program	Designed the second-year engineering transfer program for Selkirk College and proposed it to the college and partners
Jul 2021 – Apr 2022	Renewed Engineering Program at Selkirk college	Designed the new engineering design courses ENGR 100: Engineering Design and Communication I and ENGR 101: Engineering Design and Communication II for Selkirk College

Publications & Scholarly Activity

Refereed Publications

Refereed Articles (Published)

1. F. Wood, A. Warrington, S. Naderiparizi, C. Weilbach, V. Masrani, W. Harvey, A. Scibior, B. Beronov, J. Grefenstette, D. Campbell, S. A. Nasser, "Planning as Inference in Epidemiological Dynamics Models", *Frontiers of Artificial Intelligence*. 2022 4:550603. doi: [10.3389/frai.2021.550603](https://doi.org/10.3389/frai.2021.550603).
2. F. M. Asrar, A. H. Wen, S. A. Nasser, P. C. Dinas, C. Newman, A. Bukley, K. Crist, D. Irwin, "Space technologies for monitoring health and environmental impact of hydraulic fracturing", *The Lancet Planetary Health*, vol. 2, issue 11, pp. e469-e470, 2018, doi: [10.1016/S2542-5196\(18\)30223-7](https://doi.org/10.1016/S2542-5196(18)30223-7). [joint first author]
3. S. A. Nasser, E. Martinez, G. Durin "Collective Coordinate Descriptions of Magnetic Domain Wall Motion in Perpendicularly Magnetized Nanostructures under the Application of In-plane Fields", *Journal of Magnetism and Magnetic Materials*, vol. 468, pp. 25-43, 2018, doi: [10.1016/j.jmmm.2018.07.059](https://doi.org/10.1016/j.jmmm.2018.07.059) (<https://arxiv.org/abs/1804.00569>).
4. B. Sarma, F. Garcia-Sanchez, S. A. Nasser, A. Casiraghi, G. Durin, "Dynamics and morphology of chiral magnetic bubbles in perpendicularly magnetized ultra-thin films with the Dzyaloshinskii-Moriya Interaction", *Journal of Magnetism and Magnetic Materials*, vol. 456, pp. 433-438. 2018, doi: [10.1016/j.jmmm.2018.01.075](https://doi.org/10.1016/j.jmmm.2018.01.075).
5. J. Vandermeulen, S. A. Nasser, B. Van de Wiele, G. Durin, B. Van Waeyenberge, L. Dupre, "Comparison between collective coordinate models for domain wall motion in PMA nanostrips in the presence of the Dzyaloshinskii-Moriya interaction", *Journal of Magnetism and Magnetic Materials*, vol. 449, pp. 337-352, 2018, doi: [10.1016/j.jmmm.2017.10.008](https://doi.org/10.1016/j.jmmm.2017.10.008). [Joint First Author]
6. A. Daoulah, S. Al-kaabi, A. Lotfi, M. Al-Murayeh, S. A. Nasser, W. Ahmed, S. N. Al-Otaibi, M. N. Alama, O. E. Elkhateeb, A. J. Plotkin, M. M. Malak, K. Alshali, M. Hamzi, S. Al Khunein, M. Abufayyah, A. A. Alsheikh-Ali, "Inter-ethnic marriages and severity of coronary artery disease in men undergoing angiography: A multicenter study of Arabian Gulf States", *World Journal of Cardiology*, vol. 9(4), pp. 371-377, 2017, doi: [10.4330/wjc.v9.i4.371](https://doi.org/10.4330/wjc.v9.i4.371).
7. A. Daoulah, O. E. Elkhateeb, S. A. Nasser, M. Al-Murayeh, S. Al-kaabi, A. Lotfi, M. N. Alama, S. M. Al-Faifi, M. Haddara, C. M. Dixon, I. S. Alzahrani, A. A. Alghamdi, W. Ahmed, A. Fathey, E. Haq, A. A. Alsheikh-Ali, "Socioeconomic Factors and Severity of Coronary Artery Disease: A Multicenter Study of Arabian Gulf States", *The Open Cardiovascular Medicine Journal*, vol. 11pp. 47-57, 2017, doi: [10.2174/1874192401711010047](https://doi.org/10.2174/1874192401711010047).
8. S. A. Nasser, S. Moretti, E. Martinez, G. Durin, C. Serpico, "Collective Coordinate Models of Domain Wall Dynamics in PMA Materials under Spin Hall Effect and Longitudinal in-Plane Fields", *Journal of Magnetism and Magnetic Materials*, vol. 426, pp. 195-201, 2017, doi: [10.1016/j.jmmm.2016.11.081](https://doi.org/10.1016/j.jmmm.2016.11.081).
9. J. Vandermeulen, S. A. Nasser, B. Van de Wiele, G. Durin, B. Van Waeyenberge, L. Dupre, "The effect of the Dzyaloshinskii-Moriya interaction on field-driven domain wall dynamics analysed by a semi-analytical approach", *Journal of Physics D: Applied Physics*, vol. 49 (46), no. 465003, 2016, doi: [10.1088/0022-3727/49/46/465003](https://doi.org/10.1088/0022-3727/49/46/465003).
10. S. A. Nasser, "Motivations for Space Exploration: A Survey within the Space Community", *Journal of the British Interplanetary Society*, vol. 68 (5-6), pp. 135-141, October 2015.

11. P. C. Dinas*, C. Mueller*, N. Clark*, T. Elgin*, S. A. Nasser*, E. Yaffe*, J. B. Clark, S. Madry, F. M. Asrar, "Innovative Methods to Benefit Public Health Using Space Technology During Disaster Relief", Journal for Disaster Medicine and Public Health Preparedness, vol. 9 (3), pp. 319-328, 2015, doi:[10.1017/dmp.2015.29](https://doi.org/10.1017/dmp.2015.29). [joint first author, paper highlighted on the [cover of the journal](#), and received [dedicated editorial](#)]

Refereed Conference Proceedings

1. S. A. Nasser*, E. Martinez, G. Durin, "Effect of Canting on Magnetic Domain Wall Motion", INTERMAG, Dublin, April 2017 [[available online](#)].
2. S. Ali Nasser*, S. Moretti, E. Martinez, G. Durin, C. Serpico, "Analytical Modeling of Domain Wall Dynamics in PMA Materials under Spin Hall Effect and in-Plane Fields", Proceedings of the first IEEE Conference Advances in Magnetism, Bormio, 2016 [[available online](#)].
3. S. A. Nasser*, B. Sarma, G. Durin, C. Serpico, "Analytical Modeling of Magnetic Domain Wall Motion under Applied Fields and Currents", 20th International Conference in Magnetism, Barcelona, July 2015 (Published in physics procedia, vol. 75, pp. 974-985), doi: [10.1016/j.phpro.2015.12.133](https://doi.org/10.1016/j.phpro.2015.12.133).
4. S. A. Nasser*, F. M. Asrar, "An Integrated Space-based Solution in Support of Public Health during Disaster Relief", 7th International Conference on Recent Advances in Space Technologies (RAST), Istanbul, June 2015, doi: [10.1109/RAST.2015.7208402](https://doi.org/10.1109/RAST.2015.7208402).
5. S. A. Nasser*, M. Emanuelli, "SGAC Space Safety and Sustainability Project Group - Reflecting the Views of the Next Generation for Five Years", 7th International Conference on Recent Advances in Space Technologies (RAST), Istanbul, June 2015, doi: [10.1109/RAST.2015.7208404](https://doi.org/10.1109/RAST.2015.7208404).
6. S. A. Nasser*, M. Emanuelli, S. Fisher, S. Raval, A. Turconi, E. David, V. Braun, "Design of an Active Space Debris Removal Mission Using Modified Launch Vehicle Upper Stages", International Astronautical Congress 2013, Beijing (and Tsinghua University IAF-SUAC International Student Workshop 2013), October 2013.
7. M. Emanuelli, S. A. Nasser*, S. Raval, A. Turconi, C. Nwosa, "Design and Evaluation of an Active Debris Removal Mission with Chemical and Electrodynamics Tether Propulsion", VIII International Science and Technology Conference for the 70th anniversary of OmSTU, November 2012 (Invited paper).

Refereed Technical Reports

1. S. A. Nasser*, "[Magnetic Domain Wall Motion: Micromagnetic and Collective Coordinate Modeling](#)", PhD Thesis, Politecnico di Torino, 2018.
2. S. A. Nasser*, "[Development of Surrogate Fuels for Jet Fuel](#)", MASc. Thesis, University of Toronto Institute for Aerospace Studies, August 2013.
3. S. A. Nasser*, "Development of an Algorithm and a Program for the Conceptual Design and Preliminary Sizing of Multistage Expendable Launch Vehicles", Undergraduate thesis/project report, K. N. Toosi University of Technology, September 2010.

Non-Refereed Publications

Non-Refereed Articles (Published)

1. J. Yoo, T. Joseph, D. Yung, S. A. Nasser*, F. Wood, "Ensemble Squared: A Meta AutoML System", arXiv preprint, arXiv:2012.05390. 2020 Dec 10.

Non-Refereed Proceedings

1. S. Ali Nasser, "Towards a Community-Driven Lunar Registry of Accidents and Issues", International Astronautical Congress, Milan, 2024
2. S. Ali Nasser, G. Impresario, "The Concept of An integrated Intelligent Health Evaluation and Support Platform for Deep Space Exploration", International Astronautical Congress, Bremen, 2018
3. S. Ali Nasser, "Case-based Space Outreach: The Case of A Mission to Mars", International Astronautical Congress, Bremen, 2018
4. Stephanie Wan, Chiara Cocchiara, Arnau Pons, Ali Nasser, "Establishing and Sustaining a Young Professional Programme in an International Space Professional Organization", International Astronautical Congress, Adelaide, September 2017.
5. S. A. Nasser, G. Durin, "Spins in Space: Spintronics Enabling Future Space Exploration Endeavours", International Astronautical Congress, Adelaide (C2. Materials and Structures Symposium, session 8. Specialised Technologies, Including Nanotechnology), September 2017.
6. A. Rivolta, J. Wang, C. Thro, N. Carletti, S. A. Nasser, J. Lousada, M. Emanuelli, "Analysis on spacecraft safety enhancement through on-orbit servicing", 8th IAASS Conference, Melbourne-Florida, 2016.
7. J. Lousada, A. Rivolta, M. Emanuelli, S. A. Nasser, "Identification of Hazards Associated with a One-way Human Mission to Mars", 8th IAASS Conference, Melbourne-Florida, 2016.
8. N. Prasad Nagendra, K. Kumar, L. Bettiol, G. Federico, A. Alizadeh, O. Ogunmodimu, S. Shojaee, M. Emanuelli, S. A. Nasser, "An analysis of the applicability of space debris mitigation guidelines to the commercial small-satellite industry", International Astronautical Congress 2015, Jerusalem, October 2015.
9. C. Dubois, L. Bacsardi, M. Deiml, A. Kumar, S. A. Nasser, A. Bartolini, J. Todd, K. Howells, "Policy Considerations for New Human Space Exploration Strategies: The Space Generation Perspective", International Astronautical Congress 2015, Jerusalem, October 2015.
10. J. Lousada, R. Rajput, H. Gamal, C. Kiang, G. Kamaletdinova, J. Loughman, P. Bertrand, S. A. Nasser, M. Emanuelli, "Technical Safety Analysis of a One-Way Human to Mars Mission", International Astronautical Congress 2015, Jerusalem, October 2015.
11. D. E. Chiuri, A. Turconi, A. Hussein, N. Nader, S. Raval, M. Emanuelli, S. A. Nasser, "Active Debris Removal: Overview and Figures of Merit of Debris Grabbing Strategies", International Astronautical Congress 2015, Jerusalem, October 2015.
12. A. Rivolta, L. Ferrario, C. Borriello, J. R. Medel, L. Ghasemzadeh, J. C. Wang, S. A. Nasser, M. Emanuelli, "International spacecraft design policies for orbital servicing", International Astronautical Congress 2015, Jerusalem, October 2015.
13. S. A. Nasser, A. Blanc, M. A. Czapski, S. Madry, D. Williams, F. M. Asrar, "Space4Health: Exploring Innovative Ways to Utilize Space for Disaster Relief", International Astronautical Congress 2014, Toronto, October 2014.
14. S. A. Nasser, "Motivations for Human Space Exploration - The next Generations Perspectives", International Astronautical Congress 2014, Toronto, October 2014.
15. S. A. Nasser, "Bio-inspired robots for planetary exploration", International Astronautical Congress 2014, Toronto, October 2014.
16. S. A. Nasser, "Applications of airborne wind energy systems in space exploration", International Astronautical Congress 2014, Toronto, October 2014.
17. S. A. Nasser, "Challenges of Human Space Exploration – Rethinking what is possible", International Astronautical Congress 2013, Beijing, October 2013.

18. S. A. Nasser, "Educating the Next Generation in Space Sciences - Activities at the University of Toronto", International Astronautical Congress 2013, Beijing, October 2013.
19. M. V. Alonsoperez, S. A. Nasser, U. Somalwar, "Improving Communication for Space Exploration Missions to Mars", International Astronautical Congress 2013, Beijing, October 2013.
20. S. A. Nasser, M. Emanuelli, S. Raval, A. Turconi, "Active Space Debris Removal using Modified Launch Vehicle Upper Stages Equipped with Electrodynamic Tethers", 6th IAASS conference, Montreal, May 2013 (ESA SP-715).
21. S. A. Nasser, M. Emanuelli, S. Raval, A. Turconi, C. Becker, "Active Space Debris Removal using European Modified Launch Vehicle Upper Stages equipped with Electrodynamic Tethers", 6th European Conference on Space Debris, April 2013 (ESA SP-723) [[link](#)].
22. M. Emanuelli, S. Raval, S. A. Nasser, A. Turconi, C. Nwosa, "Design and Evaluation of Active Debris Removal Mission with chemical propulsion and electrodynamic tether", 2012 Beijing Space Sustainability Conference, November 2012.
23. S. A. Nasser, "Development of a liquid propellant rocket engine conceptual design and preliminary sizing program for use in the design of aerospace vehicles", Proceedings of the 62nd International Astronautical Congress, Cape Town, October 2011.

Non-Refereed Technical Reports/ Government Report/ Whitepapers (including Publication Date, Title of the Articles, and Publisher)

1. Ali Nasser, "[Lunar Accidents, Incidents, and Issues Reporting System \(LAIIRS\)](#)", Open Lunar Foundation Whitepaper, 2024.
2. "[2020 Autonomous Vehicle Technology Report](#)", Wevolver, Feb 2020 (Managing Editor).
3. S. Ali Nasser, "Failure Mode Analysis and CAD Modeling of the Raven RQ-11B", Prepared for Defence Research and Development Canada (DRDC) under contract W7714-4501884635: "Development of micro and mini Unmanned Aerial Vehicle Computer-Aided Design models", June 2019.
4. S. Ali Nasser, "Failure Mode Analysis and CAD Modeling of the DJI Phantom 4 Pro V2.0", Prepared for Defence Research and Development Canada (DRDC) under contract W7714-4501884635: "Development of micro and mini Unmanned Aerial Vehicle Computer-Aided Design models", April 2019.
5. D. P. Patel, A. Martin, S. W. Chiu, J. Lousada, A. Rivolta, S. A. Nasser, "National research on space debris, safety of space objects with nuclear power sources on board and problems relating to their collision with space debris", Committee on the Peaceful Uses of Outer Space Scientific and Technical Subcommittee Fifty-third session Vienna, 30 January -10 February 2017 (A/AC.105/C.1/111).
6. J. Lousada, A. Malcolm, H. Gamal, R. Rajput, M. Emanuelli, S. A. Nasser, "Report on National Research on Space Debris, Safety of Space Objects with Nuclear Power Sources on Board and Problems of their Collision with Space Debris", Committee on the Peaceful Uses of Outer Space Scientific and Technical Subcommittee Fifty-second session Vienna, 2-13 February 2015 (A/AC.105/C.1/2015/CRP.8 and A/AC.105/C.1/109).
7. Space Generation Congress 2014 Final Report, co-author of exploration section.
8. S. A. Nasser, F. Asrar, "Exploring Innovative Ways to Utilize Space for Disaster Relief", Space Times, September/October 2014.
9. Space4Health ([Final Report and Executive Summary](#)), Space Studies Program 2014, International Space University, August 2014.
10. S. A. Nasser, I. Wand, G. Garcia Buleje, Z. Wang, E. Sim, A. Carroll Goldman, "Inclusive Innovation in the Pacific Region", Policy Brief for the Pacific Economic Cooperation Council, April 2014.
11. Space Generation Congress 2013 Final Report, co-author of exploration section.

12. S. A. Nasser, "[Active Debris Removal: A Necessary Evil](#)", Space Safety Magazine, June 2013.
13. Space Generation Congress 2012 Final Report, Co-author of exploration section.
14. S. A. Nasser, "Development of Surrogate Mixtures for Aerospace Fuels– RAC Report 2", UTIAS Research Assessment Committee (RAC), April 2011.
15. S. A. Nasser, "Development of Surrogate Mixtures for Aerospace Fuels – RAC Report 1", UTIAS Research Assessment Committee (RAC), December 2010.
16. S. A. Nasser, "Liquid Propellant Rocket Engines Conceptual Design" (in Persian), Space Launch Research Center, K. N. Toosi University of Technology, Summer 2010.
17. S. A. Nasser, "Liquid Propellant Rocket Engines Sizing and technology" (in Persian), Technical and Internship Report, Space Systems Research Center, K.N.Toosi University of Technology, summer 2009.
18. S. A. Nasser, Mahyar Abdolhosseini, Atieh Alihosseini, "Preliminary Design of a UAV for surveillance", KART group, January 2009.
19. S. A. Nasser, "Multidisciplinary Design of a Small Satellite Launcher Using Direct Ant Colony Optimization (DACO)", MDO Laboratory, K.N.Toosi University of Technology, August 2008.
20. S. A. Nasser, "Ant Colony Optimization" (in Persian), Technical Report, MDO Laboratory, K.N.Toosi University of Technology, 2007.
21. S. A. Nasser, "Optimization Techniques: An Overview" (in Persian), Technical Report, MDO Laboratory, March 2007.

Industry-Scholarly Activity

Date	Organization	Description of Scholarly Output
Jan 2024 – Oct 2024	Open Lunar Foundation	Led the conception of the Lunar Accidents and Issues Reporting Systems (LAIRS).
Jan 2023 – Jul 2023	Canadian Space Agency	Led the conception of the mishap and closed-call recording and investigation system
Aug 2022 – Jan 2023	Canadian Space Agency	Developed a software tool to predict the landing site of a lighter than air vehicle for the STRATOS program
Dec 2020 – Aug 2021	University of British Columbia	Proposed and led the creation of the Automated Pandemic Response Profiler, funded by the DND IDEAS program
Nov 2019 – Sep 2021	University of British Columbia	Managed UBC's Automated Machine Learning activities and contributions to the DARPA Data-Driven Discovery of Models (D3M) program
Jan – Aug 2019	Defence Research and Development Canada	Failure mode analysis of mini- and micro-unmanned aerial vehicles
Sep 2014 – Sep 2018	ISI Foundation	Created analytical descriptions of magnetic domain wall dynamics at the Collective Phenomena in Physics & Materials Science group at ISI, enabling material characterization studies.
Jan 2015 – Apr 2018	SGAC Space Safety and Sustainability Project Group	Commented on the use of Nuclear Power Sources in Space, and contributed to discussions on the UNOOSA Long-term Sustainability Guidelines
Jan 2012 – Sep 2013	SGAC Space Safety and Sustainability Project Group	Developed an active space debris removal mission using launch vehicle upper stages

Conference Presentations

Invited Talks

1. Ali Nasser, "Engaging with Global Space Community as a Student or Young Professional", SGAC Iran World Space Week Webinar, Oct 2020.
2. Ali Nasser, "Space4Health: Using space assets and disruptive innovations in support of public health during disasters (and beyond)", Space Health Symposium Webinar organized by the ad astra vita project and Mars Society Australia for World Space Week 2020, Oct 2020.
3. Ali Nasser, "Engaging with Global Space Community: A Guide for Students and Young Professionals", Faza.ir Space+ webinar, April 2020.
4. Ali Nasser, "Planning as Inference in Epidemiological Simulators", Theoretical_Geography_VVOIP_Debates, Debate 3.8: COVID-19 by the Numbers, Modes, Big Data, and Reality, April 2020.
5. Ali Nasser, "Marie Sklodowska-Curie Fellowship: Lessons Learned/Life during Your Fellowship", European Research Day 2019 organized by EURAXESS North America, Vancouver, BC.
6. Ali Nasser, "Marie Sklodowska-Curie Fellowship: A Personal Story", European Research Day 2019 organized by EURAXESS North America, Vancouver, BC.
7. S. Ali Nasser, "What is SGAC?", Montreal Space Symposium 2018.
8. S. Ali Nasser, "SpaceGen in the Era of Commercial Space", Digital Keynote, Space Tech Summit, January 2018.

Oral Presentations and Talks at Conferences

* highlights the presenting author when multiple authors are present.

1. S. Ali Nasser, "Towards a Community-Driven Lunar Registry of Accidents and Issues", International Astronautical Congress, Milan, 2024.
2. S. Ali Nasser, G. Impresario, "The Concept of An integrated Intelligent Health Evaluation and Support Platform for Deep Space Exploration", International Astronautical Congress, Bremen, 2018
3. S. Ali Nasser, "Case-based Space Outreach: The Case of A Mission to Mars", International Astronautical Congress, Bremen, 2018
4. Stephanie Wan*, Chiara Cocchiara, Arnau Pons, Ali Nasser*, "Establishing and Sustaining a Young Professional Programme in an International Space Professional Organization", International Astronautical Congress, Adelaide, September 2017.
5. S. A. Nasser*, G. Durin, "Spintronics in Space", International Astronautical congress (IAC), Adelaide, September 2017. [Finalist for the IAF Luigi G. Napolitano Award]
6. S. A. Nasser*, E. Martinez, G. Durin, "Magnetic Domain Wall Motion Under In-plane Fields: Wires Vs. Films", The 5th Italian Conference on Magnetism (MAGNET), Assisi, September 2017.
7. S. A. Nasser*, E. Martinez, G. Durin, "Effect of Canting on Magnetic Domain Wall Motion", INTERMAG, Dublin, April 2017.
8. S. A. Nasser, "Spintronics in Space", Grid Talk, Space Up Milan, 2016.
9. S. A. Nasser, "Space Safety and Sustainability", Grid Talk, Space Up Milan, 2016.
10. S. A. Nasser, "SGAC: How to get involved?", Grid Talk, Space Up Milan, 2016.
11. S. A. Nasser, "SGAC in Europe", T-5 Talk, Space Up Milan, 2016.
12. S. A. Nasser, E. Martinez, G. Durin*, "Spin-Hall Effect Driven Magnetic Domain Wall Motion under the Application of In-plane Fields in PMA Nanowires", 61st Annual Conference on Magnetism and Magnetic Materials, New Orleans, October 2016.

13. S. A. Nasser^{*}, G. Durin, "Collective Coordinate Models for Magnetic Domain Wall Motion", 7th Young Researcher Meeting, Torino, October 2016.
14. S. A. Nasser^{*}, G. Durin, "Applications of Spintronics in Future Space Exploration Endeavours", International Astronautical congress (IAC), Guadalajara, September 2016.
15. S. A. Nasser^{*}, E. Martinez, G. Durin, "Analytical Modeling of Domain Wall Dynamics in PMA Materials under Spin Hall Effect and in-Plane Fields", 2nd Marie Curie School on Domain Walls and Spintronics, Spetses, Greece, September 2016.
16. S. A. Nasser^{*}, G. Durin, "Analytical Modeling of Magnetic Domain Wall Motion", Joint European Magnetism Symposia (JEMS), Glasgow, August 2016. [won second place for best early career presentation]
17. S. A. Nasser^{*}, E. Martinez, G. Durin, "Analytical Modeling of Domain Wall Dynamics in PMA Materials under Spin Hall Effect and in-Plane Fields", Joint European Magnetism Symposia (JEMS), Glasgow, August 2016.
18. S. A. Nasser^{*}, E. Martinez, G. Durin, "Analytical Modeling of Domain Wall Dynamics in PMA Materials under Spin Hall Effect and in-Plane Fields", VI Euro-Asian Symposium «Trends in Magnetism» (EASTMAG), Krasnoyarsk, August 2016.
19. S. A. Nasser^{*}, S. Moretti, E. Martinez, G. Durin, C. Serpico, "Analytical Modeling of Domain Wall Dynamics in PMA Materials under Spin Hall Effect and in-Plane Fields", First IEEE Conference Advances in Magnetism, Bormio, March 2016.
20. N. Prasad Nagendra^{*}, K. Kumar, L. Bettiol, G. Federico, A. Alizadeh, O. Ogunmodimu, S. Shojaei, M. Emanuelli, S. A. Nasser, "An analysis of the applicability of space debris mitigation guidelines to the commercial small-satellite industry", International Astronautical Congress 2015, Jerusalem, October 2015.
21. C. Dubois^{*}, L. Bacsardi, M. Deiml, A. Kumar, S. A. Nasser, A. Bartolini, J. Todd, K. Howells, "Policy Considerations for New Human Space Exploration Strategies: the Space Generation Perspective", International Astronautical Congress 2015, Jerusalem, October 2015.
22. J. Lousada^{*}, R. Rajput, H. Gamal, C. Kiang, G. Kamaletdinova, J. Loughman, P. Bertrand, S. A. Nasser, M. Emanuelli, "Technical Safety Analysis of a One-Way Human to Mars Mission", International Astronautical Congress 2015, Jerusalem, October 2015.
23. D. E. Chiuri^{*}, A. Turconi, A. Hussein, N. Nader, S. Raval, M. Emanuelli, S. A. Nasser, "Active Debris Removal: Overview and Figures of Merit of Debris Grabbing Strategies", International Astronautical Congress 2015, Jerusalem, October 2015.
24. A. Rivolta^{*}, L. Ferrario, C. Borriello, J. R. Medel, L. Ghasemzadeh, J. C. Wang, S. A. Nasser, M. Emanuelli, "International spacecraft design policies for orbital servicing", International Astronautical Congress 2015, Jerusalem, October 2015.
25. S. A. Nasser, "Limitations of the 1-D Model for DW Motion", Spinicur Summer School 2015, Braga, Portugal.
26. S. A. Nasser^{*}, F. M. Asrar, "An Integrated Space-based Solution in Support of Public Health during Disaster Relief", 7th International Conference on Recent Advances in Space Technologies (RAST), Istanbul, June 2015.
27. S. A. Nasser, M. Emanuelli, "SGAC Space Safety and Sustainability Project Group - Reflecting the Views of the Next Generation for Five Years", 7th International Conference on Recent Advances in Space Technologies (RAST), Istanbul, June 2015.

28. A. Bartolini, S. A. Nasser, A. Persad, "The Space Generation Advisory Council: Students and Young Professionals Shaping the Future of Space", National Space Society's 34th annual International Space Development Conference, Toronto, May 2015.
29. S. A. Nasser, "Bio-inspired robots for planetary exploration", International Astronautical Congress 2014, Toronto, October 2014.
30. S. A. Nasser, "Applications of airborne wind energy systems in space exploration", International Astronautical Congress 2014, Toronto, October 2014.
31. S4H team, "Space4Health", [Final presentation](#), Space Studies Program 2014, International Space University, August 2014.
32. S4H team, "Space4Health", Internal Review, Space Studies Program 2014, International Space University, July 2014.
33. S. A. Nasser, "Applications of Computational Biomedical Simulation in Human Space Flight", Human Performance in Space Departmental Seminar, Space Studies Program 2014, International Space University.
34. S. A. Nasser, "SGAC's Space Safety and Sustainability Project Group", Lightning talk at the 2014 ISU alumni weekend, July 2014.
35. S. A. Nasser, "The Space Generation Advisory Council", Participant talk at the Space Studies Program 2014, International Space University, July 2014.
36. S. A. Nasser, "Active Space Debris Removal: A Necessary Evil", The DIY Innovator, Toronto Students for the Advancement of Aerospace conference, Toronto Students for the Advancement of Aerospace, October 2013.
37. S. A. Nasser, "Space Generation Advisory Council: Beyond a Network", The Do-It-Yourself Innovator Aerospace Conference 2013, Toronto Students for the Advancement of Aerospace, October 2013.
38. S. A. Nasser, "Challenges of Human Space Exploration – Rethinking what is possible", International Astronautical Congress 2013, Beijing, October 2013.
39. S. A. Nasser, "Educating the Next Generation in Space Sciences - Activities at the University of Toronto", International Astronautical Congress 2013, Beijing, October 2013.
40. M. V. Alonsoperez, S. A. Nasser*, U. Somalwar, "Improving Communication for Space Exploration Missions to Mars", International Astronautical Congress 2013, Beijing, October 2013.
41. S. A. Nasser*, M. Emanuelli, S. Raval, A. Turconi, "Design of an Active Space Debris Removal Mission Using Modified Launch Vehicle Upper Stages", Tsinghua University IAF-SUAC International Student Workshop 2013, October 2013.
42. S. A. Nasser*, M. Emanuelli, S. Raval, A. Turconi, "Active Space Debris Removal using Modified Launch Vehicle Upper Stages Equipped with Electrodynamic Tethers", 6th IAASS conference, Montreal, May 2013.
43. S. A. Nasser, "Space Communications for Mars", presented at SGC 2012 on behalf of the Space Exploration working group to SGC delegates and leaders of the space industry, Naples, September 2012.
44. S. A. Nasser, "The SGAC Space Safety and Sustainability (SSS) Working Group", presented on behalf of the SSS co-leads at the SGC 2012, Naples, September 2012.
45. J. Lee*, B. Rasaratham*, S. A. Nasser*, "PM Lessons Learnt from the T-Rex Project", 2nd Annual Procept-AACE-University of Toronto Project Management Paper Competition, April 2012.
46. S. A. Nasser, "Development of Surrogate Mixtures for Aerospace Fuels– RAC Report 2", UTIAS Research Assessment Committee (RAC), April 2013.

47. S. A. Nasser, "Development of Surrogate Mixtures for Aerospace Fuels – RAC Report 1", UTIAS Research Assessment Committee (RAC), December 2012.
48. S. A. Nasser, "Development of an algorithm for the conceptual design of multistage expendable launch vehicles", Undergraduate thesis committee presentation, August 2012.

Poster and Interactive Presentations

* highlights the presenting author when multiple authors are present.

1. S. A. Nasser*, R. AllenSpach, G. Durin, "Computational Study of Magnetic Domain Walls with Intermediate Structures", The 5th Italian Conference on Magnetism (MAGNET), Assisi, September 2017.
2. S. A. Nasser*, G. Durin, "ITN-WALL: Controlling domain wall dynamics for functional devices", Science Communication School, Castiglione del Lago, March 2017.
3. B. Sarma*, Y. Liu, X. Zhang, N. Vernier, M. Voto, A. Magni, S. A. Nasser, L. Lopez-Diaz, J. Langer, B. Ocker, G. Durin, L. H. Diez, and D. Ravelosona, "Tailoring the domain wall pinning in CoFeB/MgO films with perpendicular magnetic anisotropy", 61st Annual Conference on Magnetism and Magnetic Materials, New Orleans, October 2016.
4. S. A. Nasser*, G. Durin, "Analytical study of field-driven bubble expansion in PMA materials under the application of in-plane fields", 61st Annual Conference on Magnetism and Magnetic Materials, New Orleans, October 2016.
5. J. Vandermeulen*, S. A. Nasser, B. Van de Wiele, G. Durin, B. Van Waeyenberge and L. Dupré, "An averaging collective coordinate approach to interpret field-driven domain wall dynamics in magnetic nanostrips with Dzyaloshinskii-Moriya interaction", 2nd Marie Curie School on Domain Walls and Spintronics, Spetses, Greece, September 2016.
6. B. Sarma*, S. A. Nasser, F. Garcia-Sanchez, B. Van de Wiele, G. Durin, "Evolution of bubble domain wall in the presence of Dzyaloshinskii-Moriya interaction", 2nd Marie Curie School on Domain Walls and Spintronics, Spetses, Greece, September 2016.
7. J. Vandermeulen*, S. A. Nasser, B. Van de Wiele, G. Durin, B. Van Waeyenberge and L. Dupré, "An averaging collective coordinate approach to interpret field-driven domain wall dynamics in magnetic nanostrips with Dzyaloshinskii-Moriya interaction", Joint European Magnetism Symposia (JEMS), Glasgow, August 2016.
8. B. Sarma*, S. A. Nasser, F. Garcia-Sanchez, B. Van de Wiele, G. Durin, "Evolution of bubble domain wall in the presence of Dzyaloshinskii-Moriya interaction", Joint European Magnetism Symposia (JEMS), Glasgow, August 2016.
9. S. A. Nasser*, E. Martinez, G. Durin, "Analytical Modeling of Domain Wall Pinning in PMA Materials", Joint European Magnetism Symposia (JEMS), Glasgow, August 2016.
10. S. A. Nasser*, G. Durin, "ITN-WALL: Controlling domain wall dynamics for functional devices", Marie Curie Alumni Association Annual Conference, Venice, March 2016.
11. B. Sarma*, K. Shahbazi, A. Hrabec, S. A. Nasser, B. Van de Wiele, C. Marrows, G. Durin, "Bubble Domain Wall Dynamics in the Presence of Dzyaloshinskii- Moriya Interaction", MANA 2016 - Micromagnetics: Analysis, Numerics, Applications, TU Wien, February 2016.
12. S. A. Nasser*, J. Vandermeulen, G. Durin, B. Van de Wiele, C. Serpico, "Magnetic DW motion: Comparison of analytical and statistical approaches", MANA 2016 - Micromagnetics: Analysis, Numerics, Applications, TU Wien, February 2016.
13. S. A. Nasser*, G. Durin, C. Serpico, "Analytical Modeling of Magnetic DW Motion", Newspin4: Transport beyond electrons conference, Utrecht University, December 2015.

14. B. Sarma*, S. A. Nasser, J. Vandermeulen, B. V. Wiele, G. Durin, "Dynamics of the Magnetic Bubble-domains in a Perpendicular Magnetic Anisotropy (PMA) Thin Film with Dzyaloshinskii-Moriya Interaction", SpinCur Summer School 2015, Braga, Portugal.
15. S. A. Nasser*, B. Sarma, G. Durin, C. Scerpico, "Analytical Modeling of Magnetic Domain Wall Motion under Applied Fields and Currents", 20th International Conference in Magnetism, Barcelona, July 2015.
16. S. A. Nasser*, A. Blanc*, M. A. Czapski*, S. Madry, D. Williams, F. M. Asrar, "Space4Health: Exploring Innovative Ways to Utilize Space for Disaster Relief", International Astronautical Congress 2014, Toronto.
17. S. A. Nasser*, C. Borriello, A. Hussein, F. Kebe "Performance Mapping of Space Debris Removal Concepts", International Astronautical Congress 2014, Toronto.
18. S. A. Nasser, "Motivations for Human Space Exploration - The next Generations Perspectives", International Astronautical Congress 2014, Toronto.
19. S. A. Nasser*, M. Emanuelli, S. Raval, A. Turconi, P. Maier, E. David, V. Braun, C. Becker, S. Fisher, "Design of an Active Space Debris Removal Mission Using Modified Launch Vehicle Upper Stages", International Astronautical Congress 2013, Beijing.
20. M. Emanuelli*, S. A. Nasser, S. Raval, A. Turconi, C. Becker, "Active Space Debris Removal using European Modified Launch Vehicle Upper Stages equipped with Electrodynamic Tethers", 6th European Conference on Space Debris, April 2013.
21. S. A. Nasser, "Development of a liquid propellant rocket engine conceptual design and preliminary sizing program for use in the design of aerospace vehicles", 62nd International Astronautical Congress, 2011.

Other Speaking Engagements

1. Panelist, "The International Space University", Canadian Space Conference - SEDS Canada, 2024.
2. Panelist, "Canada's Role in Lunar Exploration/Gateway", Canada Space Summit 2020, Nov 2020.
3. MVA Network Update, First Online Global Moon Village Workshop & Symposium, Nov 2020.
4. Panelist, "The Space Education and Outreach Committee", NextGen Summit at the International Astronautical Congress (IAC): CyberSpace Edition, Oct 2020.
5. Host (with Stephanie Wan), 1st "SGAC Coffee Hour", April 2020.
6. Panelist and Moderator, "Finding, developing and educating your talent pool", World Summit AI: Auto & Mobility AI track, October 2019.
7. Panelist, "Post-secondary and Career Considerations for Research Co-op Students", Online session organized by the Foundation for Student Science and Technology, June 2019.
8. Panelist, "Europe-Canada Joint Research Collaborations: Trends and Tips for Navigation", European Research Day 2019, UBC.
9. Panelist, "Navigating the Canadian Space Landscape" (diversity in the Space sector), Montreal Space Symposium, October 2018.
10. Panelist, "20th Anniversary of the IAF Emerging Space Leaders (ESL) Grant Programme", International Astronautical Federation, Bremen, October 2018.
11. Master Moderator, 33rd Space Symposium, 4-6 April 2017, Colorado Springs, Colorado.

Scholarly Work-In Progress

Books, Monographs, Compilations, Manuals in Preparation or Under Review

1. S. Ali Nasser, "Product Design and Development for Scientists, Engineers and Business Professionals", Open Educational Resource, 2025 (in progress).
2. S. Ali Nasser, "Startup Toolkit", Open Educational Resource, 2025 (in progress).
3. S. Ali Nasser, "A Collection of Mini-Cases for Management and Business Ethics", Open Educational Resource, 2025 (in progress).

Other Scholarly & Professional Activities & Achievements

Professional Scholarly Activity

Manuscript Review

- Reviewer, Scientific Reports, 2020
- Reviewer, Journal of Physics: Condensed Matter, 2020
- Reviewer, Iranian Journal of Science and Technology, Transactions A: Science, 2019 and 2020
- Reviewer, Physical Review B, 2018
- Reviewer, Journal of the Chinese Advanced Materials Society, 2018
- Reviewer, Materials Research Express, 2017
- Reviewer, Journal of Physics D: Applied Physics, 2016
- Reviewer, Journal of Student Science and Technology, 2016-2017
- Technical Reviewer, AIAA Region VII Australia-Asia Student Paper Conference 2016
- Technical Reviewer, AIAA Region VII Australia-Asia Student Paper Conference 2015
- Technical Reviewer, AIAA Region VII Australia-Asia Student Paper Conference 2014
- Reviewer, AIAA Journal of Aircraft, 2012

Conference Organization

- Organizing Team, INCOSE Canada Student Competition, 2025 - 2026.
- E1 (Space Education and Outreach) Symposium Coordinator, International Astronautical Congress 2024, Milan
- Subject Matter Expert Mentor, Global Goals Jam Winter 2024
- Subject Matter Expert Mentor, Global Goals Jam Fall 2023
- E1 (Space Education and Outreach) Symposium Coordinator, International Astronautical Congress 2023, Paris
- Global Technical Symposium (GTS) Coordinator, International Astronautical Congress 2023, Paris
- Subject Matter Expert Mentor, Global Goals Jam Winter 2023
- Subject Matter Expert Mentor, Global Goals Jam Fall 2022
- Mentor, NASA Space Apps Vancouver, Oct 2022
- E1 (Space Education and Outreach) Symposium Coordinator, International Astronautical Congress 2022, Dubai
- Global Technical Symposium (GTS) Coordinator, International Astronautical Congress 2022, Dubai
- E1 (Space Education and Outreach) Symposium Coordinator, International Astronautical Congress 2021, Dubai
- Global Technical Symposium (GTS) Coordinator, International Astronautical Congress 2021, Dubai
- Moderator, Special Track: Gender equality and diversity in space in support of SDG 5 and SDG 10, SpaceGen United, 2020

- E1 (Space Education and Outreach) Symposium Coordinator, International Astronautical Congress 2020, Online
- Global Technical Symposium (GTS) Coordinator, International Astronautical Congress 2020, Online
- Special Session Organizer: AI and Space, International Astronautical Congress 2019, Washington D. C.
- E1 (Space Education and Outreach) Symposium Coordinator, International Astronautical Congress 2019, Washington D. C.
- Global Technical Symposium (GTS) Coordinator, International Astronautical Congress 2019, Washington D. C.
- International Programming Committee Member, Sciences and Humanities International Research Conference IV (SHIRCON 2019), Campus Universidad de Ciencias y Humanidades, Lima, Peru
- International Programming Committee Member, 2019 International Conference on Control of Dynamical and Aerospace Systems (XPOTRON), Arequipa, Peru
- Global Technical Symposium (GTS) Coordinator, International Astronautical Congress 2018, Bremen, Germany
- E1.2 Session Chair (Secondary Education), International Astronautical Congress 2018, Bremen, Germany
- E1.1 Session Chair (Primary Education), International Astronautical Congress 2018, Bremen, Germany
- SGAC liaison and team moderator, Y-ISEF side event of the International Space Exploration Forum, 1-3 March 2018, Tokyo, Japan
- Technical Program Committee ESA's Second Symposium on Space Educational Activities, 11-13 April 2018, Budapest, Hungary
- Organizer, SGAC-Airbus Moon Village Workshop, October 2018, Bremen, Germany
- E1.2 Session Chair (Secondary Education), International Astronautical Congress 2017, Adelaide, Australia
- Technical coordinator of the Global Technical Sessions (GTS), International Astronautical Congress 2017, Adelaide, Australia
- SGAC Chair, Space Generation Congress 2017, Adelaide, Australia
- Organizer, Next Generation Programme on the Future of Human Space Exploration: Towards a Moon Village, June 2017, Torino, Italy
- Master Moderator, 33rd Space Symposium, 4-6 April 2017, Colorado Springs, Colorado
- SGAC Chair, Space Generation Fusion Forum 2017, Colorado Springs, April 2017
- SGAC Chair, 2nd European Space Generation Workshop, Paris, France
- E1.4 session chair, International Astronautical Congress 2016, 26-30 September 2016, Guadalajara, Mexico
- SGAC Co-Chair, Space Generation Congress 2016, 22-24 September 2016, Guadalajara, Mexico
- Coordinator, Second Marie Curie School on Domain Walls and Spintronics, September 2016, Spetses, Greece
- Logistics Coordinator, StemCellTalks 2015, Toronto, Canada
- Local Organizing Committee and Special Projects Lead, Space Generation Congress 2014
- Logistics Coordinator, StemCellTalks 2014, Toronto, Canada
- Logistics Coordinator, StemCellTalks 2013, Toronto, Canada
- Logistics Coordinator, StemCellTalks 2012, Toronto, Canada
- Coordinator, First Lighter Than Air (LTA) Vehicle competition, K.N.Toosi University of Technology, May 2009, Tehran, Iran
- Assistant Coordinator, First Water rocket competition, K.N.Toosi University of Technology, Dec 2008, Tehran, Iran

Professional Development

- Teaching Excellence Academy, University of Waterloo, April 2024
- Faculty Innovation Fellows Program (FIFP), Invention to Innovation Program, May 2024
- Ontario Extend Educator Microcredential, Ecampus Ontario, Nov 2023
- Designing Space Missions & Systems Designing, Teaching Science & Technology, Inc., Nov 2022
- Instructional Skills Workshops for Faculty, UBC, May 2022
- Innovation for Change program, CERN, SAFM and Politecnico di Torino, February-June 2016
- Advanced University Teaching Preparation (AUTP) Certificate, Teaching Assistants' Training Program (TATP), University of Toronto, January 2013
- Cambridge Certificate in English Language Teaching to Adults (CELTA), Language Studies Canada, June 2012
- Teaching Fundamentals Certificate, Teaching Assistants' Training Program (TATP), University of Toronto, April 2011

Service

On-Campus/ Institutional Service

Date	Activity/ Role	Description
Jun 2025	Judge, MBA Games Case team selection, UCW	Support the selection of the UCW MBA Games case team
Jul 2023 – Mar 2025	Academic Advisor, Science and Business Program, University of Waterloo	Provide one on one support on academic matters to students within the Science and Business and Biotech/CPA programs
Oct 2023 – Mar 2025	Founder and Faculty Advisor, Innosolve, University of Waterloo	Created Innosolve, a student group focused on technology and policy innovation
Sep 2023 – Sep 2024	Advisor to UW Orbital and Waterloo Rocketry Teams, University of Waterloo	Provided advice and support to student teams
Jul 2021 – Jul 2022	Engineering Transfer Program Coordinator, Selkirk College,	Represented Selkirk College at the BC Engineering Articulations, and worked with the Dean and Chair to develop program and create extracurricular activities for students

Committee Work

Date	Committee	Role
May 2025 - present	Interdisciplinary Capstone Committee Member, UCW	Support the redesign of capstone experiences within the MBA Program
Jul 2023 – Mar 2025	Science and Business Curriculum Committee member, University of Waterloo	Renewed the Science and Business Program curriculum, created program policies, and updated the list of electives available to students

Professional Examination

Date	Exam	Description
Aug 2024	Associate Systems Engineering Professional (ASEP)	For Associate Systems Engineering Professional (ASEP) licensure
May 2021	National Professional Practice Examination (NPPE)	For Professional Engineering (PEng) Licensure
Jan 2014	Project Management Professional (PMP)	For Project Management Professional (PMP) licensure

Scholarly and Professional Service Activities Beyond Campus

Service to the Profession

Date	Activity/ Role	Description
Dec 2024 – present	Board Member, International Council on Systems Engineering (IncoSE) Canada Chapter	I support education and outreach initiatives as a member of the board.
Apr 2018 – present	Honorary Board Member, Space Generation Advisory Council (SGAC)	Provide advice and support to the SGAC leadership
Sep 2021 – present	Chair, Space Education and Outreach Committee (SEOC), International Astronautical Federation	I lead the team of 6 Vice Chairs in implementing the activities of the Space Education and Outreach Committee, including various symposia and networking events.
Sep 2018 – present	E1 Symposium Coordinator, Space Education and Outreach Committee (SEOC), International Astronautical Federation	I coordinate the E1 Technical symposium at the International Astronautical Congress, a symposium with 10 technical sessions focusing on education and outreach.
Sep 2015 - present	Committee Member, Space Education and Outreach Committee (SEOC), International Astronautical Federation	Support Space Education and Outreach initiatives at the IAF
Sep 2021 - Jun 2023	Vice Chair Technical Activities, Workforce Development - Young Professionals Program (WD-YPP) Committee, International Astronautical Federation	I coordinate the IAF Global Technical Symposium, a series of 5 technical sessions at the International Astronautical Congress that were broadcast online.
Sep 2015 – Jun 2023	Committee Member, Workforce Development - Young Professionals Program (WD-YPP) Committee, International Astronautical Federation	Support next generation and young professional initiatives at the IAF
Sep 2018 – Sep 2021	Vice Chair - E1 Symposium, Space Education and Outreach Committee (SEOC), International Astronautical Federation	As a member of the SEOC leadership team, I contributed to the general direction of the committee and run the E1 Technical symposium at the International Astronautical Congress, a symposium with 10 technical sessions focusing on education and outreach.
Apr 2018 – Jan 2020	Alumni Lead, Space Generation Advisory Council (SGAC)	Formalized the SGAC alumni program and created the alumni fund
Apr 2018 – Apr 2019	Advisory Board Member, Space Generation Advisory Council (SGAC)	Provide advice and support to the SGAC leadership

Date	Activity/ Role	Description
Apr 2016 – Apr 2018	Chair, Space Generation Advisory Council (SGAC)	This is highest ranking elected officer in the organization, in charge of organizational leadership and strategic planning.
Jan 2012 – Apr 2018	Member, Space Safety and Sustainability Project Group, Space Generation Advisory Council (SGAC)	Main projects focused on space debris removal, nuclear power sources in space, and long-term sustainability guidelines
Oct 2015 – Apr 2016	Operations Manager, Space Generation Advisory Council (SGAC)	Restructure the SGAC team and coordinate creation and documentation of internal processes
Apr 2014 – Apr 2016	Project Group Co-Lead, Space Safety and Sustainability Project Group, Space Generation Advisory Council (SGAC)	Manage group activities and supervise research projects conducted by the group
Apr 2013 – Jan 2016	Executive Secretary, Space Generation Advisory Council (SGAC)	Managed internal communications of the organization and the SGAC global network recruitment as a member of the Executive Office