CURRICULUM VITAE

NIRU NIRUPAMA

Associate Professor of Disaster and Emergency Management, York University (Tenured since July 2005) School of Administrative Studies T: 416-736 2100 x 30330| Email: nirupama@yorku.ca

EDUCATION

- DEng, Water Resources Engineering, Kyoto University, Japan, 1996
- Master in Hydrology, Indian Institute of Technology Roorkee, India, 1991
- M.Sc. Statistics, Indian Institute of Technology Kanpur, India, 1981

PROFESSIONAL CERTIFICATES

- Associate Business Continuity Professional, DRI Canada, April 2008
- Wild Fire Smart, Manitoba Emergency Services Conference, Brandon, October 2003
- University Teaching and Learning, University of Western Ontario, Canada, August 2002
- Japanese Language, Kyoto University, Japan, March 1993

RESEARCH INTEREST AREAS

- Disaster risk management and mitigation
- Natural disasters: floods, tsunami, hurricane, extreme weather
- GeoInformation systems for disaster simulation using Geographic Information System (GIS)
- Engaging public for resilience and capacity building
- Business continuity planning and disaster recovery
- Multi-criteria, multi-objective decision making support systems using GIS, remote sensing techniques, and fuzzy mathematics.

EMPLOYMENT HISTORY (Canada)

- Assistant Professor (tenure track), Department of Applied Disaster & Emergency Studies, Brandon University, Canada (August 2003 June 2005)
- Sessional Instructor, Department of Civil Engineering, University of Western Ontario, Canada (September 2002 December 2002)
- Postdoctoral Fellow, Department of Civil & Environmental Engineering, University of Western Ontario, Canada (October 2000 August 2002)

INTERNATIONAL COLLABORATION 2013-2015

Academic Network for Disaster Resilience to Optimise (ANDROID) (with Professors Haigh and Amaratunga), Centre for Disaster Resilience, School of the Built Environment, The University of Salford, Salford, UK (2013-15). Development of methodologies for natural disaster risk reduction and invited participation in meetings and conferences.

EDITORSHIP

Guest Editor (with Costas Armenakis) (2013). Special Issue on Sociological Aspects of Natural Disasters, *Natural Hazards*, Springer, 66, p140.

PEER REVIEWED JOURNAL ARTICLES (past 6 years)

- 1. Jahanadish A, Nirupama N (2017). Quantitative analysis of earthquake fatalities: case of Iran, Natural Hazards, DOI 10.1007/s11069-017-2778-6
- 2. Dumbuya B, Nirupama N (2017). Disasters and long term economic sustainability: a perspective on Sierra Leone, Special Issue on Investments in Disaster Resilience, Int. J Disaster Resilience in the Built Environment, 8(1).
- 3. Irwin S, Schardong A, Simonovic SP, Nirupama N (2016). ResilSIM—A Decision Support Tool for Estimating Resilience of Urban Systems. Water 8(9): 377.
- 4. Nirupama, N. (2015). Understanding risk from floods and landslides in the Himalayan region: a discussion to enhance resilience. planet@risk, Global Risk Forum, 3 (2): 231-235. Oct 2015
- 5. N. Nirupama T. Popper A. Quirke (2015). Role of social resilience in mitigating disasters, Int. J Disaster Resilience in the Built Environment, 6(3): 363 377.

- 6. Guindon, S-M, Nirupama, N. (2015). Reducing risk from urban heat island effects in cities, Natural Hazards, 77 (2): 823-831. June 2015
- 7. Daddar, S., Nirupama, N. (2015). The potential of recurrent epidemics and pandemics in a highly mobile global society, Natural Hazards, 77 (2): 1395-1403. June 2015
- 8. Agada, S., Nirupama, N. (2015). A serious flooding event in Nigeria in 2012 with specific focus on Benue State, Natural Hazards, 77 (2): 1405-1414. June 2015
- 9. Nirupama, N., Sharma, R., Verma, K., Panigrahi, S. (2014). A multi-tier hazard-Part I: description of the event, Natural Hazards. 76 (1): 259-269. Mar 2015
- 10. Sharma, R., Verma, K., Panigrahi, S. Nirupama, N. (2014). A multi-tier hazard-Part II: meteorological Analysis, Natural Hazards 76 (1): 271-281. Mar 2015
- 11. Nirupama, N., Adhikari, I., Sheybani, A. (2014). Natural hazards in Ontario Canada taking stock for mitigating disasters, Procedia Economics and Finance, Elsevier, 18: 55-61. Sep 2014
- 12. Armenakis, C., Nirupama, N. (2014). Flood risk mapping for the city of Toronto, Procedia Economics and Finance, Elsevier, 18: 320-326. Sep 2014
- Armenakis, C., Nirupama, N. (2014). Urban impacts of ice storm Toronto 2013, Natural Hazards, 74(2): 1291-1298. (May 2014).
- 14. Nirupama, N., Hafezi, H. (2014). A short communication on school bus accidents: A review and analysis, Natural Hazards, 7(3): 2305-2310. (Jun 2014).
- 15. Nirupama, N., Armenakis, C., Montpetit, M. (2014). Is flooding in Toronto a concern? Natural Hazards, 72(2): 1259-1264. (Jan 2014).
- 16. Armenakis, C., Nirupama, N., Zalidid, G., Alexandridis, T. (2014). Degradation of Coastal Wetlands using Examples from Greece and Canada: A Review, International J Ecology and Development, 29 (3):87-109.
- 17. Nirupama, N. (2013). Disaster Risk Management, *Invited* contribution in Encyclopaedia of Natural Hazards, (Ed.) Peter Bobrowsky, Springer, 164-169, 1133p. (July 2013)
- 18. Armenakis, C. and Nirupama, N. (2013). Estimating spatial disaster risk in urban environments, Geomatics, Natural Hazards and Risk, Taylor & Francis, 4 (4): 289-298. (Dec 2013).
- 19. Nirupama, N. (2013). Vertical evacuation during cyclones: suitable for developing countries. *Natural Hazards*. 69:1137-1142. (Oct 2013).
- 20. Nirupama, N. (2013). Tsunami versus storm surge: a brief review. Natural Hazards. 69:1123-1130. (Oct 2013).
- 21. Nirupama, N. (2013). Is it possible to rank hurricanes in a unique manner? Natural Hazards. 67: 963-968.
- 22. Nirupama, N. and Armenakis, C. (2013). Sociological Aspects of Natural Hazards. Editorial, Special Issue, *Natural Hazards*. 66:1-2.
- 23. Nirupama, N. and Maula, A. (2013). Engaging Public for Building Resilient Communities to Reduce Disaster Impact, Special Issue on Sociological Aspects of Natural Disasters Springer, *Natural Hazards*. 66:51-59.
- 24. Armenakis, C. and Nirupama, N. (2013). Prioritization of Disaster Risk in a Community using GIS, Special Issue on Sociological Aspects of Natural Disasters Springer, *Natural Hazards*. 66:15-29.
- 25. Nirupama, N. and Etkin, D. (2012). Institutional Perception and Support in Emergency Management in Ontario, Canada, *Disaster Prevention and Management*, Emerald, 21(5): 599-607.
- Nirupama, N. (2012). Risk and Vulnerability Assessment A Comprehensive Approach, International Journal of Disaster Resilience in the Built Environment, Emerald, 3:2.
- 27. Ballisario, L, J. McGee and N. Nirupama (2012). Emergency Management Education in Canada: A View from the Crossroads, *In* Disaster Risk and Vulnerability: Mitigation through Mobilizing Communities. Eds.: C.E. Haque and D. Etkin, McGill-Queen's University Press, Canada.
- 28. Nirupama, N. (2011). Book Review: Systems Approach to Management of Disasters: Methods and Applications (Simonovic, SP), Wiley, 2009, 308 p *Disaster Prevention and Mitigation*, Emerald, 20 (4).
- 29. Khalafzai, AK and Nirupama, N. (2011). Building Resilient Communities through Empowering Women with Information and Communication Technologies: APakistan Case Study, *Sustainability* 3(1), 82-96; doi:10.3390/su3010082 <u>http://www.mdpi.com/2071-1050/3/1/82</u>

CONFERENCE PROCEEDINGS AND PRESENTATIONS (past 6 years)

1. Nirupama N, Simonovic SP, Elliott M (2017). Disaster adaptiveness, resilience, and capacity building by accounting for people's perception: a Canadian case study, 7th Int. Conference on Flood Management (ICFM7), 05-07 September 2017, University of Leeds, UK (accepted).

- 2. Nirupama N, Jubril J (2016). Social capital and disaster resilience: A Canadian case study, Proceedings of the 6th International Disaster and Risk Conference, IDRC Davos, Switzerland, Aug 28-Sep 01, 2016, p 464-467.
- Dumbuya B, Nirupama N (2016). Disasters and Long Term Economic Sustainability: A Perspective on Sierra Leone, Proceedings of the 6th International Disaster and Risk Conference, IDRC Davos, Switzerland, Aug 28-Sep 01, 2016, p 191-194.
- 4. Nirupama, N., Hebert, L., Jubril, J. (2015). Urban heat island effect in metropolitan cities: taking stock, 5th Building Resilience Conference, Newcastle, Australia, 15-17 July 2015.
- 5. Nirupama, N. (2015). Community partnership in building resilience for dam related emergencies, Canadian Dam Association Workshop on Emergency Management, Ottawa, Feb 24-25, 2015.
- 6. Lee, N.M., Ellis, D., Nirupama, N. (2014). North Atlantic Oscillation and the Variability of Atlantic Tropical Cyclones: Implications for Disaster Risk Management, CRHNet Symposium, Oct 22-24, 2014, Toronto.
- 7. Dumbuya, B., Nirupama, N. (2014). Understanding community resilience using disaster models in post conflict Sierra Leone. CRHNet Symposium, Oct 22-24, 2014, Toronto.
- 8. Khayeri, M.S., Nirupama, N. (2014). Are women and children more vulnerable to natural disasters the case of Chicago heat wave of 1995? CRHNet Symposium, Oct 22-24, 2014, Toronto.
- 9. McNeil, C., Subbotina, K., Nirupama, N. (2014). Pandemics and emergency management perspectives: understanding historical, environmental, and first responder implications. CRHNet Symposium, Oct 22-24, 2014, Toronto.
- Nirupama, N., Adhikari, I., Sheybani, A. (2014). Natural hazards in Ontario Canada taking stock for mitigating disasters, 4th International Conference on Building Resilience, Salford Quays, UK, September 9-11 2014. BEST PAPER AWARD.
- 11. Nirupama, N. (2014). Session Chair, 4th International Conference on Building Resilience, Salford Quays, UK, September 9-11 2014.
- 12. Armenakis, C., Nirupama, N. (2014). Flood risk mapping for the city of Toronto, 4th International Conference on Building Resilience, Salford, UK, Sep 8-11, 2014.
- 13. Nirupama, N. (2014). Risk from a three tier multi hazard in Uttarakhand region of India, Global Risk Forum, Davos, Switzerland, Aug 24-28, 2014.
- 14. Nirupama, N. (2014). Personal statement on science & technology towards the Post 2015 framework for Disaster Risk Reduction. IDRC Davos Switzerland, p177.
- 15. Nirupama, N. (2014). Red Chair Session, IDRC Davos Switzerland. http://idrc.info/outcomes/red-chair-statements/
- 16. Nirupama, N. (2014). Defining risk and its role in disaster management, FIDS Symposium, University of Western Ontario, London, Canada, May 11-12, 2014.
- 17. Thomson, K., Nirupama, N., Popper, T., Pradhan, S., Higuchi, K. (2014). A qualitative study of the experiences of first responders, International Conference on Disaster Mitigation, Preparedness, Response and Sustainable Reconstruction, Centre for Rebuilding Communities after Disasters, Boston, USA, May 8-9, 2014.
- 18. Guindon, S. and Nirupama, N. (2013). Natural hazards and economic development and planning in the Caribbean, 8th Caribbean Conference on Comprehensive Disaster Management, Jamaica, December 2-6, 2013.
- 19. Nirupama, N. (2013). Role of Social Resilience in Mitigating Seismic Disasters, International Conference of the International Institute for Infrastructure, Renewal and Reconstruction (IIIRR) Brisbane, Australia, July 7-10, 2013.
- 20. Armenakis, C. and Nirupama, N. (2013). Spatial risk estimation for technological hazards, Int. Conference on Earth Observation for Global Changes and 2013 Annual Conference of The Canadian Institute of Geomatics (CIG), Ryerson University, Toronto, Ontario, Canada, 5-7 June 2013.
- 21. Nirupama, N (2012). The Triple Disaster of Japan and People's Resilience. CRHNet Annual Symposium, Vancouver, October 24-26, 2012.
- 22. Nirupama, N. (2012). A Reasonable Success Story of Vertical Evacuation against Tropical Cyclones in India, Global Risk Forum, Davos, Switzerland August 26-Sep 1, 2012.
- 23. Nirupama, N. and Murty, TS. (2012). Similarities and Differences in Tsunamis and Storm Surge Mitigation, International Conference on Disaster Resilience, Kumamoto Japan, August 24-26.
- 24. Nirupama, N. (2012). Tsunamis and Hurricanes Difference in Mitigation Strategies. Invited talk at the Department of Civil Engineering, Kyoto University, Katsura, Japan. July 27, 2012.
- 25. Nirupama, N. (2012). Encouraging Public Participation for Furthering Community Resilience in Time of Crisis, Research Celebration Week, York University, March 12-15.
- 26. Nirupama, N. (2012). Session Chair, On the 1st Anniversary of the Tohoku Earthquake, Faculty of Liberal Arts & Professional Studies, York University, March 9, 2012.

- 27. Nirupama, N. (2011). Disaster Risk and Vulnerability, Research Buffet Seminar Series, School of Administrative Studies, York University, November 24, 2011.
- 28. Nirupama, N., Nistor, I. And Murty, TS. (2011). Probabilistic versus Deterministic Approaches in Early Warning Systems for Natural Hazards: Coastal Inundation from Tsunamis and Storm Surges, Conference on Probabilistic Methodologies in Water and Wastewater Engineering, Toronto, September 23-24, 2011.
- 29. Nirupama, N. (2011). Risk and Vulnerability Assessment A Comprehensive Approach, International Conference on Building Resilience, Kandalama, Sri Lanka, July 20-22, 2011.

OTHER PUBLICATIONS (past 6 years)

- 1. Contributor to "Technical guideline: Inundation mapping", sub-working group inundation mapping, CDA August 2016.
- 2. Contributor to the report titled "Canadian Dam Safety and Emergency Management: A Need for Regulation, Canadian Dam Association, April 2016.
- 3. Book review: All standing: the remarkable story of the Jeanie Johnston, the legendary Irish famine ship (Kathryn Miles), Marine Geodesy. 36 (3): 347-348. (Sep 2013).
- 4. Foreword *In* Disaster Risk Management Conflict and Cooperation, (Eds) S.R. Sensarma and A. Sarkar. Concept Publishing Company Private Ltd., New Delhi, India (2012).

HONOURS/COMPETITIVE AWARDS/FUNDING (past 6 years and significant)

- NSERC CREATE with Prof Slobodan Simonovic \$15,000 (Oct 2016)
- SSHRC Travel Grant \$1000 (Aug 2016)
- LA&PS International conference travel grant \$1000 (Aug 2016)
- SSHRC Partnership grant with Prof Peter Penz as PI (unsuccessful)
- Indo Shastri Research Grant with Prof Ramanathan (co-applicant), MGR Research Institute, India (unsuccessful)
- NSERC CREATE co-applicant with Prof Slobodan Simonovic \$8,500 (Oct 2015)
- Best paper award, International Conference on Disaster Resilience, Salford, UK (Sep 2014)
- SSHRC Travel Grant \$1000 (for travel in Aug 2014)
- LA&PS International conference travel grant \$1000 (for travel in Aug 2014)
- SSHRC Partnership Grant as Co-applicant (PI D. Etkin) \$25K (July 2014)
- Merit award \$3,000 (2014)
- Minor Research Grant, York University \$4,165 (Dec 2013)
- SSHRC Travel Grant \$1,300 (June 2013)
- Seed Grant for International Collaboration (with Prof Solis) \$3,000 (2013)
- Academic Innovation Fund York University (with Prof Costas Armenakis) \$12,000 (2013)
- SSHRC Small \$1,500 (2012)
- York Ad-hoc travel fund \$268.93 (2012)
- YUFA Conference travel fund \$500 (2012)
- Academic Innovation Fund York University (with Prof Costas Armenakis) \$14,700 (2012)
- CIHR (Collaborator with Dr. Brian Schwartz), Public Health Ontario. \$25,000 (2012)
- LA&PS Conference travel Grant \$1000 (2012)
- SSHRC Travel Grant \$800 (2012)
- SSHRC Travel Grant \$1,300 (2011)
- York Ad-hoc travel fund \$160 (2011)
- Merit award \$2,000 (2009)
- SSHRC Research Development Initiative Grant, \$37,950 (2008)
- Merit Award \$2,000 (2007)

TEACHING

GRADUATE - York University

- DEMS 5080 Practicum in Disaster & Emergency Management (since 2016)
- DEM5040 Natural Disasters (since 2007).
- DEM5081 Applied Topics in Disaster & Emergency Management (2012).
- DEM5031 Topics in Business Continuity (2011).
- DEM5050 Qualitative Research Methods in Disaster Management (2007).

UNDERGRADUATE - York University

- ADMS 3701 Disaster Risk Management (since 2005) in class and Internet
- ADMS 4708 Seminar in Disaster & Emergency Management (since 2013)
- ADMS 3703 Business Continuity Planning (2007-10)

SUPERVISION/EXAMINATION (past 6 years)

- 1. 2017 Imran Aslam Khan, Directed Reading, Earthquake protection in urban and rural environment case of Pakistan (ongoing)
- 2. 2016 Mark Elliott, Research Assistant, Integrated approach for resilience estimation and disaster risk reduction, NSERC CREATE funded project (ongoing)
- 3. 2016 Victoria Stevens, Research Assistant, Integrated approach for resilience estimation and disaster risk reduction, NSERC CREATE funded project (Nov 2016-Jan 2017)
- 4. 2016 Zaheer Zia, Directed Reading, World Risk Index a review
- 5. 2015 Sarah Irwin, Research Assistant, Quantitative Resilience Simulator, NSERC CREATE funded project (with Slobodan Simonovic, Western University).
- 6. 2015 Colleen Simpson, Graduate Assistant. Tornado response in Vaughn. Oct 2015
- 7. 2015 Judith Jubril, MRP Supervisor, Topic: Social capital, public education, and community outreach: effective tools for emergency managers, MDEM York U, Canada (in progress).
- 8. 2015 Barlu Dumbuya, MRP Supervisor, Topic: Disasters and long term economic sustainability: a perspective on Sierra Leone. MDEM York U, Canada (in progress).
- 9. 2015 Lauren Hebert, MRP Supervisor, Topic: Are teachers concerned with school-based emergencies? MDEM York U, Canada (in progress).
- 2015 Amin Owrangi, PhD external examiner. Topic: An approach to developing a spatio-temporal composite measure of climate change related human health impacts in urban environments, Dept. of Civil Engineering, Western University, Canada. (July 28, 2015)
- 11. 2015 Yassin Oleiwan, PhD candidate at Northcentral University, Hawaii. I'm advising her on her main research survey questionnaire based on my work. April 2015.
- 2014 Katie Subbotini, MRP Topic: Natural disaster and health of internationally deployed responders, MDEM York U. Dec 2014
- 13. 2014 Barlu Dumbuya, DR Topic: Disaster resilience in Sierra Leone, MDEM York U. Aug 2014
- 14. 2014 McNeil, Cheryl, DR Topic: Business continuity planning for the police, MDEM, York U. (July 2014).
- 15. 2014 Barlu Dumbuya, Poster, 2nd annual Undergraduate Research Fair, York University, Feb 25, 2014.
- 16. 2014 Durage, Samanthi, PhD External Examiner, Mitigation of the Impact of Tornadoes in the Canadian Prairies. Civil Engineering, University of Calgary, Canada, January 2014.
- 17. 2014 Agada, Susan, MRP, The failure of sovereignty as responsibility and the making of disaster: A case study of the 2012 flooding disaster in Nigeria, MDEM, York U. (Dec 2013).
- 18. 2014 Ali Sheybani, GA topic Natural hazards of Ontario. (Sep 2013-Apr 2014).
- 19. 2014 Indra Adhikari, GA topic Explaining the role of expert analysis in the 2013 Toronto flooding using chaos theory ((Sep 2013-Apr 2014).
- 20. 2014 Harshita Mathur, GA topic –. New students' handbook and organizing a job fair for disaster and emergency management students. (Sep 2013-Apr 2014).
- 21. 2014 Sarah Jacob, GA topic –. New students' handbook and organizing a job fair for disaster and emergency management students. (Sep 2013-Apr 2014).
- 22. 2013 Wendel Chan, Graduate thesis committee. Topic: 3D environment for simulation of emergencies and decision making training, Master in Geomatics Engineering, York U. (Mar 2014).
- 23. 2014 Nicole Wilson, MRP committee, Topic: The mitigation of stress in business organizations, MDEM York U. (Dec 2013).
- 24. 2013 Zoe Kavanagh, DR Topic: Slow-onset Disasters in Emergency Management: HIV/AIDS, MDEM York U. (Dec 2013).
- 25. 2013 Hedieh Hafezi, DR Topic: School bus accidents taking stock: The case of North American accidents, MDEM, York U. (Dec 2013).
- 26. 2013 Tammy Popper, Directed Readings, Topic: First respondents' experiences, MDEM, York University. (Fall 2013).
- 27. 2013 Sarah-Maude Guindon, MRP, Topic: Integration of disaster risk reduction approach to urban planning, MDEM, York University. (Dec 2013).
- 28. 2013 Sarah-Maude Guindon, GA topic: Geoinformation-based disaster management training facility prototype setup. (Sep 2013-Apr 2014).

- 29. 2013 Alicia Benton, Supervisor, MRP, Topic: Emergency Management and Health Emergencies, MADEM, Royal Roads University, Canada. (Oct 2013).
- 30. 2013 Sarah-Maude Guindon, DR Topic: Disaster risk reduction and resilient communities, MDEM, York University (Jul-Aug 2013).
- 2013 Sarah Oberholzer, GA topic –Geoinformation-based disaster management training facility prototype set-up. (Sep 2012-Apr 2013).
- 32. 2013 Tammy Popper, GA topic Response/intervention dynamics on scene during disasters. Supervised with Prof. K. Thomson. (Sep 2013-Apr 2014).
- 33. 2013 Claire McDonald, Supervisor, MRP, Topic: Hazard Prediction and Responsibility, MDEM, York University, Canada.
- 34. 2012 Marina Kompaniyets, GA topic: Is York prepared for the 2015 games? MDEM York U.
- 35. 2012 Timothy Walshaw. Supervisor, MRP. Topic: Evacuation plans for the pre-disaster homeless in the event of a catastrophe, MADEM, Royal Roads University, Canada (in progress).
- 36. 2012 Rana, Marriyam. Supervisor, Independent Readings. Topic: From Terrorist Activities, Socio-Economic Troubles to Regional Destabilization: The High Price of a Refugee. MADEM, York University.
- 37. 2012 Daddar, Sabrina. Supervisor, MRP. Topic: The potential of recurrent epidemics & pandemics in a highly mobile global society, MADEM, York University, Canada.
- 38. 2012 Gentles, Charmaine. Supervisor, MRP. Topic: A comparative analysis of the Disaster Preparedness Public Education programs in Jamaica and Canada, MADEM, York University, Canada.
- 39. 2012 Hoque, Waheed. Supervisor, DR Topic: Community disaster perception and preparedness study, MADEM, York University, Canada.
- 40. 2011 Cheung, Gilda, GA topic: natural hazards.
- 41. 2011 Brasche, Hart. Graduate Assistant. Worked on preparing disaster scenarios for undergraduate class on disaster risk management.
- 42. 2011 Latendresse, Lori, Committee member, MRP, Professional & Personal Emergency Preparedness: Assessing the Need for the Development of a National Employee & Family Preparedness Program for the RCM, MADEM, York University.
- 43. 2011 Anjum, M.I., Committee member, MRP, The 2010-Flood and Small Businesses in Pakistan: Impact and Recovery Issues, MADEM, York University.
- 44. 2011 Shah, Abdulla, Committee member, MRP, interagency logistical cooperation among disaster relief agencies in the preparedness phase, MADEM, York University.
- 45. (*)2011 Ashton, Daniela, Supervisor, MRP, Topic: Emergency Management and First Nations in James Bay, Ontario (ongoing), MA-DEM, York University. Research Assistant, Topic: Emergency Management in Canada: Taking Stock

SERVICE (past 6 years)

ACADEMIC SERVICE TO THE PROFESSION

- Reviewer, Shastri Research Student Fellowship (SRSF) for a Doctoral student application (Feb 2017).
- Working Group Member, Canadian Dam Association (since 2014).
- Contributor to the Technical Bulletin on Inundation Mapping, CDA (2016)
- Discussions with Sheridan College's Community Safety Degree, Toronto, July 2015
- Member, Technical Committee, First International Conference on Water Resources, Coastal and Ocean Engineering ICWRCOE'15, Mangalore, India, March 2015.
- Facilitate and supervise DEM Graduate students' participation in the Canadian Dam Association conference in Ottawa, Feb 2015.
- Partner, 20th World Congress for Disaster and Emergency Medicine Toronto Feb 2015.
- Member, Technical Committee, CRHNet Symposium, Toronto, Oct 2014.
- Member, Emergency Management Forum, Ontario, since Sep 2013.
- ANDROID Academic Network for Disaster Resilience to Optimise Educational Development, University of Salford, UK (since June 2013).
- Member, Technical Committee, 5th GiT4NDM conference, Toronto, Oct 9-11, 2013.
- Member, Technical Committee, CIG 2013, Ryerson University, Toronto, June 5-7, 2013.
- Member, Committee on Education, Ontario Association of Emergency Managers (OAEM), since 2012.
- Editorial board member, Natural Hazards, SpringerLink, The Netherlands (since 2005)
- Reviewer for reputable scholarly journals. To name a few: Geomatics, Hazards and Risks, Int. J Disaster Resilience in the Built Environment, J Canadian Foreign Policy, J Flood Risk Management, J Int. Development, J Rural and

Community Development, J Water Resources Management, Marine Geodesy, Natural Hazards, Natural Hazards Review, Regional Science, Policy and Practice, US Geological Survey

SERVICE AT YORK UNIVERSITY

SCHOOL LEVEL

- Chair, SAS Research Committee (current)
- Teaching peer review for two colleagues as part of the T&P process
- Member, FPC for promotion to full professor for a colleague.
- Member, Ad-Hoc T&P review committee struck for a colleague (2016)
- Chairing duties at SAS Meetings by turn as DEM area representative.
- Member, C&C Committee, SAS (2012-13).
- DEM Coordinator (since 2012). Achieved registration of the BDEM program with Public Service Canada https://www5.psc-cfp.gc.ca/coop/noitcanoitutitsnimargorphcraes.do
- Member Coordinator & Curriculum Committee (since 2012).
- Area Coordinator of Emergency Management (2007-2010) LEAD ROLE in developing the new degree program "Bachelor of Disaster and Emergency Management".

FACULTY LEVEL

- Member, T&P Committee (since October 2016).
- Organized guest visit by Lieutenant-Colonel Edward Izatt, Commanding Officer, Canadian Armed Forces Disaster Assistance Response Team (DART) (Jan 2015).
- AAPR Lead Contributor on Master of Disaster & Emergency Management (MDEM) (2014).
- Member, T&P Ad-Hoc Committee Full Professor File from SHRM (address concerns raised by SRC) (July 2014).
- GPD, Master of Disaster & Emergency Management (MDEM) (2013-2016)
- Member, Committee on Research Policy and Planning (2011-13).
- Member, T&P File Preparation Committee for a member of another Unit Full Professor, lead role in the Service component (2012-13).
- Interim Chair, Committee on Research Policy and Planning (CRPP) Sep-Dec 2012.
- Member, Grant Adjudication Sub-committee CRPP (since 2011).

UNIVERSITY LEVEL

- Member, Appeals Committee, struck to review "Criteria and procedures for promotion and continuing appointment of professional librarians" for Peter Duerr (2016).
- AA representative on DEM Search Committee, School of Admin Studies, York University, November 2015.
- Member, Search Committee, Civil Engineering, Lassonde School of Engineering, York University, November 2015.
- Fall Campus Day 2015
- AA representative, DEM Search Committee, School of Admin Studies, York University, April 2015.
- Lead, Cyclical Program Review (CPR) process for DEM programs Nov 2014- Oct 2015. Responsibilities included:
 - designing program specific questions to be included in the standard student survey
 - o developing content for Self-Study Report/binder
 - conducting Self-Study Retreat, presenting material to participating members (Director, SAS, BAS CPR Lead, Full/part time faculty in the program) and noting their input
 - working with York University Quality Assurance Office regarding external reviewers for the process of vetting, shortlisting, and final selection of two external reviewers
 - o Itinerary, invites for scheduled meetings, and logistics for the site visit of the two External Reviewers
 - o Internal reviewer's participation in the process along with scheduled meetings
 - o Follow up
- Spring Open House 2015 represented DEM programs in particular and SAS in general.
- Fall Campus Day 2014 represented DEM programs and SAS.
- AAPR Lead Contributor on Master of Disaster & Emergency Management (MDEM) (July 2014).
- Member, Search Committee, Civil Engineering, Lassonde School of Engineering, York University, Dec 2013
- Senate Committee on Academic Standards, Curriculum & Pedagogy (2012-2014)

- Senate subcommittee on Quality Assurance (2012-2014)
- Emergency Preparedness Advisory Committee (2005-2016)

SERVICE TO THE LOCAL COMMUNITY

- Working with SAWC regarding conducting a workshop at York University with a group of your students on project "There is no honour in violence against women and girls" (ongoing).
- Collaboration with South Asian Women's Centre (SAWC), Toronto on leadership and women for resilience building (2016-2017).
- Member, Advisory Committee, South Asian Women's Centre (SAWC), Toronto (since 2007).
- Essencia Art Collective for social change and community empowerment, Toronto, Aug 2014
- Endowment fund 'Nivedita and Nandita Bursary' establishment for cash award for an outstanding DEM undergrad student every year (since 2013).
- Skype chat on natural hazards with Grade 7 students of teacher Amanda Trentin at the Lady of Lourdes school in Brampton, Ontario. March 21, 2014.