CURRICULUM VITAE

NEGAR ELHAMI-KHORASANI
Assistant Professor
Department of Civil, Structural and Environmental Engineering

RESEARCH INTERESTS

Negar Elhami-Khorasani is an Assistant Professor in the Department of Civil, Structural and Environmental Engineering at the University at Buffalo. Her primary areas of research are structural fire engineering, performance-based design and reliability analysis of structures at high temperatures, resilience of communities under extreme hazards including wildfires and earthquakes, characterization of cascading multi-hazard events, such as post-earthquake fires, and their effects on structures and communities. The outcomes of her research enhance safety by developing codes and guidelines, and minimize losses by optimizing mitigation, preparedness, and response strategies. Elhami-Khorasani is a member of the ASCE Fire Protection Committee and has been leading the Fire Following Earthquake Task Group, in charge of preparing a committee report on procedures for analysis of buildings for post-earthquake fires. She is a member of the International Federation for Structural Concrete (fib) Task Group on Fire Design of Concrete Structures, as well as the International Association for Fire Safety Science (IAFSS) Large Outdoor Fires and the Built Environment working groups. Her research has been funded by the United States Geological Survey, National Fire Protection Association, ASCE Structural Engineering Institute, Charles Pankow Foundation, National Science Foundation, and Department of Transportation.

EDUCATION

Ph.D. Civil Engineering – Structural Engineering 2010-2015
Princeton University, Princeton, NJ, USA
Thesis: A Probabilistic Framework for Multi-Hazard Evaluations of Buildings and Communities Subject to Fire and Earthquake Scenarios
Supervisor: Maria Garlock

M.A.Sc. Civil Engineering – Structural Engineering 2008-2010
University of Toronto, Toronto, ON, Canada
Thesis: System-level Structural Reliability of Bridges
Supervisor: Paul Gauvreau

B.A.Sc. Civil Engineering (Honors) 2004-2008
University of Toronto, Toronto, ON, Canada
Thesis: Structural Reliability and Robustness in Probabilistic Design
Supervisor: Paul Gauvreau

PROFESSIONAL EXPERIENCE

Assistant Professor, University at Buffalo, Department of Civil, Structural and Environmental Engineering, January 2016 – present.

Postdoctoral Research Associate, Princeton University, Department of Civil and Environmental Engineering, July 2015 – December 2015: developed fragility curves for steel buildings under fire; worked with the Hazus and Ergo programs to study community resiliency under post-earthquake fires.

Research Assistant, Princeton University, Department of Civil and Environmental Engineering, September 2010 – June 2015: developed a probabilistic assessment of parametric temperature-time curves

for office building fires; modified the source code of the OpenSees software for fire and fire following earthquake analyses of steel structures; performed risk analysis of steel office buildings under fire and fire following earthquake.

Research Assistant, University of Toronto, Department of Civil Engineering, Sept. 2008 - Aug. 2010: developed a working definition and mathematical characterization for the reliability of a bridge system; evaluated safety index of a conventional bridge system (three-span twin girder steel bridge); evaluated safety index of a new bridge system (double-T high-performance concrete bridge).

National Scholarship Research Student (NSERC-USRA), University of Toronto, Department of Civil Engineering, May 2008 - August 2008: prepared an annotated bibliography of available literature on robust structural systems.

Summer Intern (Engineer), TWD Roads - Carillion Canada, Toronto, Canada, June 2007 – August 2007: conducted weather analysis for material estimation; performed project evaluation and review of the progress for tender values; researched Anti-Icing and Road Weather Information System (RWIS) technologies; created highway maintenance work schedule with Microsoft Project; created/updated labor/material reconciliation spreadsheets.

Senior Structure Drafter, Ministry of Transportation Ontario (MTO), Toronto, Canada, May 2006 – August 2006: prepared bridge inspection Request for Proposal (RFP) documents; arranged location maps; bridge inspection data sheets and drawings; inspected bridges in Central Region, Ontario; created and updated Ontario Bridge Management System (OBMS) files.

Summer Intern (Engineer), Delcan Corporation, Toronto, Canada, May 2005 – August 2005: inspected bridges to identify erosion problems; obstructions to water flow and other general defects; prepared report of bridge inspection to be submitted to the City of Toronto; performed quantity estimating; moving coordinator of the structural department.

HONORS, AWARDS, AND RECOGNITIONS

University at Buffalo
UB's Exceptional Scholar: Young Investigator Award, 2021
Fire Protection Research Foundation Medal, National Fire Protection Association, 2020
AISC Early Career Faculty, 2020
Structural Engineering Institute (SEI) Young Professional Scholarship, April 2019
ASCE ExCEEd Fellow, July 2016

Princeton University
Nominated by the Dept. of Civil and Env'l Eng. for the Graduate School Teaching Award, Spring 2013
Recipient of the Sherrerd Foundation Fellowship in the Dept. of Civil and Env'l Engineering, Fall 2013
Recipient of the Norman J. Sollenberger Fund, January 2012
Gordon Wu Fellow – Princeton University, Sept. 2010 - 2015
NSERC Post Graduate Scholarship (PGSD2), Sept. 2010 - Sept. 2012

University of Toronto
NSERC Post Graduate Scholarship (PGSM), Sept. 2008 - Sept. 2010
Beatty Fellowship Award, 2008 - Sept. 2009
Faculty of Applied Science and Engineering R.A. Downing Scholarship in Civil Engineering, Sept. 2007
Yolles-Bergmann Scholarship for 3rd year (Steel and Concrete) Structural Design Projects, Aug. 2007
Greater Toronto Sewer and Watermain Contractors Association Award in Civil Engineering, Aug. 2007
Nominated for Halsall Scholarship in Building Engineering, July 2007

Faculty of Applied Science and Engineering R.A. Downing Scholarship in Civil Engineering, Aug. 2006
Faculty of Applied Science and Engineering UMA Scholarship in Civil Engineering, Aug. 2006
Faculty of Applied Science and Engineering James Franceschini Foundation Scholarship, Aug. 2005
Rank 2 of the civil engineering class at the University of Toronto for seven semesters, 2004-2008
University of Toronto Admission Scholarship, Aug. 2004
Successfully attended Mathematics and Computer Olympiads at the national level in high school, 2002

REFEREED JOURNAL PUBLICATIONS

Underlined: student at UB (Ph.D. advisee: * Master advisee: × Undergraduate advisee: + Other: º)

Google Scholar citations as of July 2021: 500
(https://scholar.google.com/citations?user=2zvRsWMAAAAJ&hl=en)

[J29] Syed, M.*, Moeini, M.×, Okumus, P., Elhami Khorasani, N., Ross, B., Kleiss, M.C. "Analytical study of tessellated structural-architectural reinforced concrete shear walls." *Engineering Structures*, in press. (Impact factor: 3.548)

[J28] Sarreshtehdari, A.*, Elhami Khorasani, N. "Integrating the fire department response within a fire following earthquake framework for application in urban areas," *Fire Safety Journal*, 124: 103397. (Impact factor: 2.295)

[J27] Masoudvaziri, N.º, Szasdi Bardales, F.J.×, Keskin, O.K.º, Sarreshtehdari, A.*, Sun, K, Elhami Khorasani, N. (2021) "Streamlined wildland-urban interface fire tracing (SWUIFT): modeling wildfire spread in communities," *Environmental Modelling and Software*, 143, https://doi.org/10.1016/j.envsoft.2021.105097. (Impact factor: 4.807)

[J26] Coar, M., Sarreshtehdari, A.*, Garlock, M., Elhami Khorasani, N. (2021). "Methodology and challenges of fire following earthquake analysis: an urban community study considering water and transportation networks," *Natural Hazards*, in press. (Impact factor: 2.427)

[J25] Hua, N.*, Tessari, A., Elhami Khorasani, N. (2021). "Characterizing damage in a concrete lining during a tunnel fire," *Tunnelling and Underground Space Technology,* 109. (Impact factor: 4.45)

[J24] Hua, N.*, Tessari, A., Elhami Khorasani, N. (2021). "A review of tunnel fire damage assessment methods and techniques," *Transportation Research Record*, http://doi.org/10.1177/0361198120987228. (Impact factor: 1.029)

[J23] Elhami Khorasani, N., Salado Castillo, J.G.×, Gernay, T. (2021). "A digitized fuel load surveying methodology using machine vision," *Fire Technology*, 57: 207-232, https://doi.org/10.1007/s10694-020-00989-9. (Impact factor: 1.945)

[J22] Elhami Khorasani, N., Salado Castillo, J.G.×, Saula, E.+, Josephs, T.×, Nurlybekova, G.+, Gernay, T. (2021). "Application of a digitized fuel load surveying methodology to office buildings," *Fire Technology*, 57: 101-122, https://doi.org/10.1007/s10694-020-00990-2. (Impact factor: 1.945)

[J21] Sarreshtehdari, A.*, Elhami Khorasani, N. (2020). "Emergency response time for post-earthquake fires," *Journal of Earthquake Engineering*, https://doi.org/10.1080/13632469.2020.1802369. (Impact factor: 2.779)

[J20] Hua, N.*, Tessari, A., Elhami Khorasani, N. (2020). "Quantifying uncertainties in the temperature-time evolution of railway tunnel fires," *Fire Technology*, 57: 361-392, https://doi.org/10.1007/s10694-020-01007-8. (Impact factor: 1.945)

[J19] Ross, B., Yang, C.º, Kleiss, C., Okumus, P., Elhami Khorasani, N. (2020). "Tessellated structural-architectural systems: a concept for efficient construction, repair, and disassembly," *ASCE Journal of Architectural Engineering*, 26(3), https://doi.org/10.1061/(ASCE)AE.1943-5568.0000418.

[J18] Jovanovic, B., Van Coile, R., Hopkin, D., Elhami Khorasani, N., Lange, D., Gernay, T. (2020). "Review of current practice in probabilistic structural fire engineering – permanent and live load modelling." *Fire Technology*, https://doi.org/10.1007/s10694-020-01005-w. (Impact factor: 1.945)

[J17] Van Coile, R., Hopkin, D., Elhami Khorasani, N., Gernay, T. (2020). "Demonstrating adequate safety for a concrete column exposed to fire, using probabilistic methods," *Fire and Materials*, https://doi.org/10.1002/fam.2835. (Impact factor: 1.173)

[J16] Qureshi, R.*, Ni, S., Elhami Khorasani, N., Van Coile, R., Hopkin, D., Gernay, T. (2020). "Probabilistic models for temperature dependent strength of steel and concrete." *ASCE Journal of Structural Engineering*, 146(6). (Impact factor: 2.021)

[J15] Gernay, T., Elhami Khorasani, N. (2020). "Recommendations for performance-based fire design of composite steel building using computational analysis," *Journal of Constructional Steel Research*, 166, https://doi.org/10.1016/j.jcsr.2019.105906 (Impact factor: 3.062)

[J14] Sarreshtehdari, A.*, Elhami Khorasani, N., Coar, M. (2020). "A stream-lined approach for evaluating post-earthquake performance of electric networks." *Sustainable and Resilient Infrastructure*, 5(5), https://doi.org/10.1080/23789689.2018.1542211.

[J13] Coar, M., Garlock, M.E.M., Elhami Khorasani, N. (2020). "Effects of water network dependency on the electric network for post-earthquake fire suppression." *Sustainable and Resilient Infrastructure,* 5(5), https://doi.org/10.1080/23789689.2018.1563408

[J12] Qureshi, R.*, Elhami Khorasani, N., Gernay, T. (2019). "Examining the need for active boundary conditions in structural fire testing." *Journal of Structural Fire Engineering*, DOI: 10.1108/JSFE-12-2018-0042. (Impact factor: 0.74)

[J11] Elhami Khorasani, N., Gernay T., Fang, C.× (2019). "Parametric study for performance-based fire design of US prototype composite floor systems." ASCE *Journal of Structural Engineering*, 145(5). (Impact factor: 2.021)

[J10] Gernay, T., Van Coile, R., Elhami Khorasani, N., Hopkin, D. (2019). "Efficient uncertainty quantification method applied to structural fire engineering computations." *Engineering Structures*, 183:1-17. (Impact factor: 3.548)

[J9] Gernay, T., Elhami Khorasani, N., Garlock, M.E.M. (2019). "Fire fragility functions for steel frame buildings: Sensitivity analysis and reliability framework." *Fire Technology*, 55:1175-1210. https://doi.org/10.1007/s10694-018-0764-5 (Impact factor: 1.945)

[J8] Elhami Khorasani, N., Gernay, T., Garlock, M.E.M. (2017). "Data-driven probabilistic post-earthquake fire ignition model for a community." *Fire Safety Journal*, 94:33-44. (Impact factor: 1.888)

[J7] Gerasimidis, S., Elhami Khorasani, N., Garlock, M.E.M., Pantidis, P, Glassman, J.D. (2017). "Resilience of a tall steel moment resisting frame building with multi-hazard post-event fire consideration." *Journal of Constructional Steel Research*, 139: 202-219. (Impact factor: 2.509)

[J6] Elhami Khorasani, N., Garlock, M.E.M. (2017). "Overview of fire following earthquake: historical events and community responses." *International Journal of Disaster Resilience in the Built Environment*, 8(2): 158-174. (Impact factor: 1.12)

[J5] Elhami Khorasani, N., Garlock, M.E.M., Gardoni, P. (2016). "Probabilistic performance-based evaluation of a tall steel moment resisting frame under fire following earthquake." *Journal of Structural Fire Engineering*, 7(3): 193-216. (Impact factor: 0.74)

[J4] Gernay, T., Elhami Khorasani, N., Garlock, M.E.M. (2016). "Fire fragility curves for steel buildings in a community context: a methodology." *Engineering Structures*. 113: 259-276. (Impact factor: 3.548)

[J3] Elhami Khorasani, N., Garlock, M.E.M., Quiel, S.E. (2015). "Modeling steel structures in OpenSees: enhancements for fire and multi-hazard probabilistic analysis." *Journal of Computers and Structures*, 157: 218-231. (Impact factor: 3.664)

[J2] Elhami Khorasani, N., Gardoni, P., Garlock, M.E.M. (2015). "Probabilistic fire analysis: evaluation of steel structural members." ASCE *Journal of Structural Engineering,* 141(12). (Impact factor: 2.021)

[J1] Elhami Khorasani N., Garlock M.E.M., Gardoni P. (2014). "Fire load: survey data, recent standards, and probabilistic models for office buildings." *Engineering Structures*, 58: 152-165. (Impact factor: 3.548)

JOURNAL PUBLICATIONS SUBMITTED FOR REVIEW

Underlined: student at UB (Ph.D. advisee: * Master advisee: × Undergraduate advisee: + Other: º)

[J4] Hua, N.*, Elhami Khorasani, N., Tessari, A., "Numerical modeling of the behavior of reinforced concrete tunnel slabs during heating and cooling," Submitted to *Engineering Structures*. (Impact factor: 3.548)

[J3] Hua, N.*, Elhami Khorasani, N., Tessari, A., Ranade, R. "Experimental study of fire damage to reinforced concrete tunnel slabs," Submitted to Fire Safety Journal. (Impact factor: 2.295)

[J2] Salado Castillo, J.G.×, Bruneau, M., Elhami Khorasani, N. "Functionality measures for quantification of building seismic resilience index," Submitted to *Engineering Structures*. (Impact factor: 3.548)

[J1] Castillo, R.*, Okumus, P., Elhami Khorasani, N., Chandola, V. "Machine learning for shear strength of reinforced-concrete beams," Submitted to *ACI Structural Journal*. (Impact factor: 1.827)

CONFERENCE PUBLICATIONS (bold indicates presenting author)

Underlined: student at UB (Ph.D. advisee: * Master advisee: × Undergraduate advisee: + Other: º)

[C39] **Van Coile, R.**, Gernay, T., Hopkin, D., Elhami Khorasani, N. (2021). "Performance criteria for performance-based fire design of concrete and composite structures," *Proceedings* of Applications of Structural Fire Engineering (ASFE), Ljubljana, Slovenia, June 9-11.

[C38] **Crocker, G.F.**, Ross, B.E., Kleiss, M.C., Okumus, P., Elhami-Khorasani, N. Romano, J.M. (2021). "Design, fabrication, and assembly of a tessellated precast concrete shear wall," *Proceedings* of the Precast/Prestressed Concrete Institute (PCI) Convention, New Orleans, LA, May 18-22.

[C37] **Sarreshtehdari, A.***, Coar, M., Elhami-Khorasani, N. (2021). "Planning for post-earthquake fires considering performance of transportation and water networks," *Proceedings* of the ASCE Lifelines Conference, University of California, Los Angeles, CA. (presentation postponed due to COVID-19).

[C36] **Ni, S.**, Van Coile, R., Elhami Khorasani, N., Hopkin, D., Gernay, T. (2020). "Lifetime economically optimum position of steel reinforcement in a concrete column exposed to natural fire." *Proceedings* of 11th International Conference on Structures in Fire, Queensland, Australia, Nov. 30 – Dec. 2. (held online due to COVID-19).

[C35] **Qureshi, R.***, Elhami Khorasani, N., Sivaselvan, M. (2020). "Developing real-time hybrid simulation to capture column buckling in a steel frame under fire." *Proceedings* of 11th International Conference on Structures in Fire, Queensland, Australia, Nov. 30 – Dec. 2. (held online due to COVID-19).

[C34] **Qureshi, R.***, Van Coile, R., Hopkin, D., Gernay, T., Elhami Khorasani, N. (2020). "A practical tool for evaluating fire induced failure probability of steel columns designed based on US prescriptive standards." *Proceedings* of 11th International Conference on Structures in Fire, Queensland, Australia, Nov. 30 – Dec. 2. (held online due to COVID-19).

[C33] **Jovanovic, B.**, Elhami Khorasani, N., Thienpont, T., Chaudhary, R.K., Van Coile, R. (2020). "Probabilistic models for thermal properties of concrete." *Proceedings* of 11th International Conference on Structures in Fire, Queensland, Australia, Nov. 30 – Dec. 2. (held online due to COVID-19).

[C32] **Hua, N.**[*], Tessari, A., Elhami Khorasani, N. (2020). "Damage assessment framework for tunnel structures under fire." *Proceedings* of 11th International Conference on Structures in Fire, Queensland, Australia, Nov. 30 – Dec. 2. (held online due to COVID-19).

[C31] **Hua, N.**[*], Tessari, A., Elhami Khorasani, N. (2020). "Concrete lining damage and structural stability assessment during tunnel fires: case studies." *Proceedings* of the Transportation Research Board, Washington, D.C., January 12-16.

[C30] **Van Coile, R.**, Hopkin, D., Elhami Khorasani, N., Lange, D., Gernay, T., (2019). "Permanent and live load model for probabilistic structural fire analysis: a review." *Proceedings* of the Third International Conference on Structural Safety under Fire and Blast Loading (CONFAB), London, U.K., September 2-4.

[C29] **Ni., S.**, Van Coile, R., Hopkin, D., Elhami Khorasani, N., Gernay, T. (2019). "Sensitivity studies of the resilience of RC columns to various fire scenarios." *Proceedings* of the IABSE Congress, New York City, NY, September 2-6.

[C28] **Hua, N.**[*], Tessari, A., Elhami Khorasani, N. (2019). "Design fire scenarios for railway tunnel fires." *Proceedings* of the IABSE Congress, New York City, NY, September 2-6.

[C27] **Van Coile, R.**, Hopkin, D., Elhami Khorasani, N., Gernay, T., (2019). "Demonstrating adequate safety for a concrete column exposed to fire, using probabilistic methods." *Proceedings* of the 15th International Conference and Exhibition on Fire Science and Engineering (Interflam), London, U.K., July 1-3.

[C26] **Hopkin, D.**, Fu, I., Gernay, T., Elhami Khorasani, N., Van Coile, R. (2019). "The MaxEnt method for probabilistic structural fire engineering – performance for multi-modal output." *Proceedings* of the 15th International Conference and Exhibition on Fire Science and Engineering (Interflam), London, U.K., July 1-3.

[C25] **Qureshi, R.**[*], Ni., S. Elhami Khorasani, N., Van Coile, R., Hopkin, D., Gernay, T. (2019). "Effect of probabilistic strength retention factors for steel and concrete on structural reliability of columns in fire." *Proceedings* of Third International Fire Safety Symposium, Ottawa, Canada, June 5-7.

[C24] **Van Coile, R.**, Gernay, T., Elhami Khorasani, N., Hopkin, D. (2019). "Exploratory study into a safety format for composite columns exposed to fire." *Proceedings* of Applications of Structural Fire Engineering (ASFE) Conference, Singapore, June 13-14.

[C23] **Szasdi Bardales, F.J.**[×], Masoudvaziri, N.[o], Elhami Khorasani, N., Sun, K. (2019). "Understanding fire spread in wildland urban interface communities." *Proceedings* of the 6th International Fire Behavior and Fuels Control, Albuquerque, NM, April 29-May 3.

[C22] Kumar, D.[o], Deshpande, A.A.[o], **Ranade, R.**, Elhami Khorasani, N. (2018). "Effects of elevated temperatures on residual bond strength of steel rebar with strain hardening cementitious composite." *Proceedings* of the 3rd R.N. Raikar Memorial International Conference and Gettu-Kodur International Symposium on Advances in Science and Technology of Concrete, Mumbai, India, December 14-15.

[C21] Stephani, A.[×], **Van Coile, R.**, Elhami Khorasani, N., Gernay, T., Hopkin, D. (2018). "Probabilistic model for steel yield strength retention factor at elevated temperatures, Influence of model choice on structural failure fragility curve." *Proceedings* of the 16th International Probabilistic Workshop (IPW), Vienna, Austria, September 12-14.

[C20] Qureshi, R.[*], **Elhami Khorasani, N.** (2018). "Instantaneous stiffness correction for hybrid fire testing." *Proceedings* of the 10th International Conference on Structures in Fire, Belfast, U.K., June 6-8.

[C19] **Van Coile, R.**, Gernay, T., Elhami Khorasani, N., Hopkin, D. (2018). "Evaluating uncertainty in response of steel-composite members and assemblies under standard fire exposure – application of the ME-MDRM." *Proceedings* of the 10th International Conference on Structures in Fire, Belfast, U.K., June 6-8.

[C18] **Elhami Khorasani, N.** Billittier, J., Stavridis, A. (2018). "Structural performance of a railway tunnel under different fire scenarios." *Proceeding* of the ASME Joint Rail Conference, Pittsburgh, PA, U.S.A., April 18-20.

[C17] **Atefi Monfared, K.**, Elhami Khorasani, N. (2017). "A novel assessment of geomechanical and fire hazard in offshore platforms." *Proceedings* of the 70 Years of Canadian Geotechnics and Geoscience – GeoOttawa. Ottawa, Canada, Oct. 1-4.

[C16] **Elhami Khorasani, N.**, Fang, C.×, Gernay, T., (2017). "Performance-based fire design and the U.S. prescriptive guidelines: a comparative study." *Proceedings* of the 39th IABSE Symposium. Vancouver, Canada, Sept. 19-23.

[C15] Elhami Khorasani, N., Fang, C.×, **Gernay, T.**, (2017). "Comparative fire analysis of steel-concrete composite buildings designed following performance-based and U.S. prescriptive approaches." *Proceedings* of the Applications of Structural Fire Engineering Conference. Manchester, U.K., Sept. 7-8.

[C14] **Gernay, T**., Elhami Khorasani, N., Garlock, M. (2017). "Fire risk assessment of multi-story buildings based on fragility analysis." *Proceedings* of the 2nd Int. Fire Safety Symposium - IFireSS. Naples, Italy, June 7-9

[C13] **Coar, M.**, Elhami Khorasani, N., Garlock, M.E.M. (2016). "Integrating water and electric systems in post-earthquake fire analysis." *Proceedings* of the International Symposium on Sustainability and Resiliency of Infrastructure. Taipei, Taiwan, Nov. 9-12.

[C12] **Elhami Khorasani, N.**, Gernay T., Garlock, M.E.M. (2016). "Probabilistic measures of earthquake effects on fire performance of tall buildings." *Proceedings* of the Sixth International Conference on Structural Engineering, Mechanics, and Computation. Cape Town, South Africa, Sept. 5-7.

[C11] **Gernay, T.**, Selamet, S., Tondini, N., Elhami Khorasani, N. (2016). "Urban infrastructure resilience to fire disaster: an overview." *Proceedings* of the World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium, Prague, Czech Republic, June 13-17.

[C10] **Elhami Khorasani, N.**, Gernay T., Garlock, M.E.M. (2016). "Fire fragility functions for community resilience assessment." *Proceedings* of the 9th International Conference on Structures in Fire, Princeton, U.S.A., June 8-10.

[C9] **Gernay T.**, Elhami Khorasani, N., Garlock, M.E.M. (2016). "Critical parameters in deriving fire fragility functions for steel gravity frames." *Proceedings* of the 9th International Conference on Structures in Fire, Princeton, U.S.A., June 8-10.

[C8] Gernay T., Elhami Khorasani, N., **Garlock, M.E.M.** (2015). "Tools for measuring a city's resilience in a fire following earthquake scenario." *Proceedings* of IABSE Conference – Structural Engineering: Providing Solutions to Global Challenge*s,* Geneva, Switzerland, September 23-25.

[C7] **Garlock, M.E.M**., Bhatia, A., Elhami Khorasani, N. (2015). "Introducing modern teaching into a classic course on structural art." *Proceedings* of IABSE Conference – Structural Engineering: Providing Solutions to Global Challenges, Geneva, Switzerland, September 23-25.

[C6] **Gernay T.**, Elhami Khorasani, N., Garlock, M.E.M. (2015). "Fragility analysis of a steel building in fire and fire following earthquake." *Proceedings* of the First International Conference on Structural Safety under Fire & Blast (CONFAB), Glasgow, Scotland, September 2-4.

[C5] **Elhami Khorasani, N.**, Garlock, M.E.M., Gardoni, P. (2015). "Probabilistic evaluation of a 9-story MRF subject to post earthquake fires." *Proceedings* of PROTECT, East Lansing, Michigan, June 28-30.

[C4] Elhami Khorasani, N., **Garlock, M.E.M.**, Gardoni, P. (2014). "Reliability-based approach for evaluation of buildings under post-earthquake fires." *Proceedings* of the 8th International Conference on Structures in Fire, Shanghai, China, June 11-13.

[C3] Elhami Khorasani, N., **Garlock, M.E.M.** (2014). "Using Opensees for analyzing a 9-story steel building under post- earthquake fires." *Proceedings* of the Tenth U.S. National Conference on Earthquake Engineering, Frontiers of Earthquake Engineering, Anchorage, Alaska, July 21-25.

[C2] **Elhami Khorasani, N.**, Garlock, M.E.M., Gardoni, P. (2013). "Application of a Bayesian-based methodology in performance evaluation of a steel perimeter column under fire." *Proceedings* of the 11th International Conference on Structural Safety & Reliability, New York, U.S.A., June 16-20.

[C1] **Elhami Khorasani, N.**, Garlock, M.E.M., Gardoni, P. (2012). "Reliability analysis of steel perimeter columns under fire." *Proceedings* of the 7th International Conference on Structures in Fire, Zurich, Switzerland, June 6-8.

BOOK CHAPTERS

Underlined: student at UB (Ph.D. advisee: * Master advisee: × Undergraduate advisee: + Other: º)

[B4] Revised/updated by Elhami-Khorasani, N., "Section 19, Chapter 4: Analyzing structural fire damage", *Fire Protection Handbook*, National Fire Protection Association, Quincy, MA, to be published in 2022 Ed.

[B3] Gernay, T., Elhami-Khorasani, N. (2019). "Resilience of the built environment to fire and fire-following-earthquake." *Handbook on Resilient Structures and Infrastructure*, edited by E. Noroozinejad Farsangi, I. Takewaki, T. Yang, A. Astaneh-Asl, and P. Gardoni. Springer. DOI: 10.1007/978-981-13-7446-3

[B2] Elhami Khorasani, N., Coar, M., Sarreshtehdari, A.*, Garlock, M.E.M. (2019). "A holistic framework to evaluate water availability for post-earthquake firefighting." *Handbook on Sustainable and Resilient Infrastructure*, edited by P. Gardoni, Routledge Taylor and Francis Group.

[B1] Elhami Khorasani, N., Garlock, M.E.M., Gardoni, P. (2016). "Probabilistic evaluation framework for fire and fire following earthquake." *Multi-hazard Approaches to Civil Infrastructure Engineering,* edited by P. Gardoni, J.M. Lafave, and Y. Hashash, Springer International Publishing.

TECHNICAL REPORTS AND PROFESSIONAL PUBLICATIONS

Underlined: student at UB (Ph.D. advisee: * Master advisee: × Undergraduate advisee: + Other: º)

[T6] Elhami Khorasani, N., Tessari, A. (2021). *Fire in tunnel collaborative project*. Final Report, Center for Advanced Infrastructure and Transportation (CAIT), Regional UTC Consortium, Rutgers, the State University of New Jersey, NJ.

[T5] Elhami Khorasani, N., Sarreshtehdari, A.* (2020). *A loss estimation and decision-making tool for managing fire following earthquake.* Final Technical Report, The United States Geological Survey, USGS G19AP00055.

[T4] Elhami Khorasani, N., Gernay, T. (2020). *A digitized surveying method using machine vision to collect fuel load data in buildings*. Society of Fire Protection Engineers, FPE eXTRA newsletter, Issue 51, March.

[T3] Elhami Khorasani, N., Salado Castillo, J.G.×, Saula, E. +, Josephs, T.×, Nurlybekova, G. +, Gernay, T. (2019). *Digitized Fuel load survey methodology using machine vision*. Fire Protection Research Foundation, FPRF-2019-22, Quincy, MA.

[T2] Anderson, W.V., Winchester M., E. Khorasani, N. (2005). *Inspection report: Humber river arch bridge, Mimico Creek Arch Bridge*. Technical report submitted by Delcan Corporation to the City of Toronto.

[T1] Elhami Khorasani, N. (2005) *Engineering Disasters*. The Project Magazine. Winter Ed. Volume: 25.

INVITED TALKS AND WEBINARS

[15] "Enhancing the resilience of tunnels subject to fire events." AASHTO Committee on Bridges and Structures Annual Meeting, Co-Presenter: Dr. Anthony Tessari from University at Buffalo, July 2021.

[14] "Enhancing the resilience of tunnels subject to fire events." Webinar presented as part of Center for Advanced Infrastructure and Transportation (CAIT) Seminar Series at Rutgers University. Co-Presenter: Dr. Anthony Tessari from University at Buffalo, February 2021.

[13] "Fuel load survey methodology in buildings." Webinar prepared and presented for the National Fire Protection Association. Co-Presenter: Dr. Thomas Gernay from Johns Hopkins University, April 2020. (Approximately 800 people registered, with about 180 participants attending the webinar in real time)

[12] "Design of structures for fire: a new paradigm." Erie-Niagara Chapter NYSSPE E-Week, Buffalo, NY, February 2020.

[11] "Performance-based fire engineering", WSP, Buffalo, NY, March 2019.

[10] "Structural fire engineering and the roadmap to resiliency", Central South University, Changsha, China, December 2017.

[9] "Structural fire engineering and the roadmap to resiliency", University of Toronto, Toronto, Canada, November 2017.

[8] "Fundamentals of fire engineering for bridges", NY State-wide Conference on Local Bridges, Syracuse, NY, October 2017.

[7] "Fundamentals of fire engineering for bridges", NYSATE 77th Conference, Buffalo, NY, May 2017.

[6] "Introduction to earthquake engineering," Structural Dynamics, University of Miami, April 2017.

[5] "Fundamentals of fire engineering for bridges", Bridge and Infrastructure Management and Public Policy, University at Buffalo, March 2017.

[4] "Fire and fire following earthquake: a probabilistic approach," Worcester Polytechnic Institute, October 2016.

[3] "Developing system-level fragility functions for performance-based fire engineering of buildings", JCSS Workshop on probabilistic methods in structural fire engineering, SP Technical Institute of Sweden, October 2016 (presented by Gernay, T.)

[2] "Fire and fire following earthquake: a probabilistic approach," Johns Hopkins University, Department of Civil Engineering, April 2015.

[1] "Probabilistic based evaluation of steel buildings under post earthquake fires", CEE460: Risk Assessment and Management, Princeton University, April 2013.

CONFERENCE ABSTRACTS (without proceedings, bold indicates presenting author in the conference)

Underlined: student at UB (Ph.D. advisee: * Master advisee: × Undergraduate advisee: U Other: o)

[25] **Syed, M.*** , Okumus, P., Elhami Khorasani, N., Ross, B., Kleiss, M.C. (2021). "Sensitivity of tessellated structural-architectural (TeSA) shear wall systems to design parameters." Engineering Mechanics Institute Conference and Probabilistic Mechanics and Reliability Conference, Virtual event, May 25-28.

[24] **Masoudvaziri, N.**o, Szasdi Bardales, F.J.×, Sarreshtehdari, A.*, Keskin, O.K.o, Sun, K, Elhami Khorasani, N. (2021). "SWUIFT: Streamlined WUI fire tracing, modeling wildfire spread in communities."

Engineering Mechanics Institute Conference and Probabilistic Mechanics and Reliability Conference, Virtual event, May 25-28.

[23] **Qureshi, R.**[*], Ni, S., Elhami Khorasani, N., Van Coile, R., Hopkin, D., Gernay, T. (2021). "Probabilistic strength retention factors for steel and concrete." Engineering Mechanics Institute Conference and Probabilistic Mechanics and Reliability Conference, Virtual event, May 25-28.

[22] **Sarreshtehdari, A.**[*], Keskin, O.K.[o], Elhami Khorasani, N. (2021). "An integrated fire spread and suppression model to predict fire following earthquake response in a community." Engineering Mechanics Institute Conference and Probabilistic Mechanics and Reliability Conference, Virtual event, May 25-28.

[21] **Castillo, R.**[*], Okumus, P., Elhami Khorasani, N., Chandola, V. (2021). "Machine learning for shear strength of reinforced-concrete beams," ACI Concrete Convention, Virtual event, March 28-April 1.

[20] **Masoudvaziri, N.**[o], Elhami Khorasani, N., Sun, K. (2021). "Simulating wildland and WUI fires: benefits and limitations of different methodologies." 101st American Meteorological Society (AMS) Annual Meeting, Virtual format, January 10-15.

[19] **Ebrahimian, H.**, Elhami Khorasani, N., Kosovic, B., Lareau, N., Taciroglu, E., Talaei-Khoei, A., Watts, A. "A data-informed physics-based computational framework for probabilistic risk assessment and emergency response management of wildfires." ASCE Lifelines Conference, University of California, Los Angeles, CA. (presentation postponed due to COVID-19).

[18] **Sarreshtehdari, A.**[*], Elhami Khorasani, N. (2019). "Emergency response time during post-earthquake fires." Engineering Mechanics Institute Conference, Pasadena, CA, June 2019.

[17] **Coar, M.**, Garlock, M., Sarreshtehdari, A.[*], Elhami Khorasani, N. (2019). "Robustness analysis for fire following earthquake scenarios considering power-water dependencies." Engineering Mechanics Institute Conference, Pasadena, CA, June 2019.

[16] **Moharrami Gargari, N.**, Sarreshtehdari, A.[*], Elhami Khorasani, N. (2019). "A case study on generating building level fragility for functionality of a non-structural component." Engineering Mechanics Institute Conference, Pasadena, CA, June 2019.

[15] Moeini, M.[×], **Elhami Khorasani, N.**, Okumus, P., Ross, B. Barrios Kleiss, M.C. (2019). "Characterizing performance of tessellated structural architectural systems." Engineering Mechanics Institute Conference, Pasadena, CA, June 2019.

[14] **Gernay, T.**, Elhami Khorasani, N. (2019). "Numerical analysis of a steel-frame building with composite floors to enable performance-based fire design." Engineering Mechanics Institute Conference, Pasadena, CA, June 2019.

[13] **Elhami Khorasani, N.** (2019). "Fundamentals of steel design at elevated temperatures and the student's perception on fire engineering." Structures Congress, Orlando, FL, April 2019.

[12] Hua, N.[*], Tessari, A., **Elhami Khorasani, N.** (2019). "Application of structural fire engineering for performance-based design of tunnels." Structures Congress, Orlando, FL, April 2019.

[11] Elhami Khorasani, N., **Gernay, T.**, Stephani, A.[×], Ni, S., Van Coile, R., Hopkin, D. (2018). "Probabilistic strength retention factors for steel and concrete, and effect on structural reliability of columns in fire." ASTM E05 Workshop on Advancements in Evaluating the Fire Resistance of Structures, Washington, DC, Dec. 2018.

[10] **Masoudvaziri, N.**[o], Szasdi Bardales, F.J.[×], Elhami Khorasani, N., Sun, K., (2018). "Observation-constrained modeling of wildfire spread in Wildland Urban Interface (WUI) communities in California." AGU Fall Meeting, Washington D.C., December 2018.

[9] **Sarreshtehdari, A.**[*], Elhami Khorasani, N. (2018). "Enhancing community resilience by planning for response time during post-earthquake fires." International Symposium on Sustainable Systems & Technology (ISSST), Buffalo, NY, June 2018.

[8] **Qureshi, R.**[*], Elhami Khorasani, N., Gernay, T. (2018). "Need of active boundary conditions for fire testing." Engineering Mechanics Institute Conference, Boston, MA, June 2018.

[7] **Gernay, T.**, Gamba, A., Elhami-Khorasani, N., (2018). "Behavior of steel frame structures under natural fire and collapse mechanisms during cooling." Structures Congress, San Antonio, Texas, April 2018.

[6] **Elhami Khorasani, N.**, Billittier, J.[×], Stavridis, A. (2017). "Assessment of structural damage in railway tunnels under fire." International Forum on High-Speed Railway, Changsha, China, Dec. 2017.

[5] **Elhami Khorasani, N.**, Haase, B.[×], Gernay, T. (2017). "A comparison of prescriptive and performance-based designs for fire as a primary or secondary event." Engineering Mechanics Institute Conference, San Diego, CA, June 2017.

[4] Coar, M., Elhami Khorasani, N., **Sarreshtehdari, A.**[*], Garlock, M.E.M. (2017). "Community resilience assessment for fire following earthquake using a probabilistic framework." Engineering Mechanics Institute Conference, San Diego, CA, June 2017.

[3] Elhami Khorasani, N., **Haase, B.**[×] (2017). "Post-blast fire resistance of low-rise buildings through membrane action of composite floor slabs." Structures Congress, Denver, Colorado, April 2017.

[2] **Elhami Khorasani, N.**, Gernay T., Garlock, M.E.M. (2017). "Effects of various design parameters on system-level fire fragility functions for steel buildings." Structures Congress, Denver, Colorado, April 2017.

[1] Coar, M., **Elhami Khorasani, N.**, and Garlock, M.E.M. (2016). "Integrating water and electric systems in a post-earthquake fire analysis." Engineering Mechanics Institute Conference and the Probabilistic Mechanics & Reliability Conference, Vanderbilt University, TN, May 2016.

STUDENT ADVISING

Ph.D. degree

[1] Ramla Karim Qureshi, *Evaluation of steel columns under fire: Real-time hybrid fire testing and reliability assessment*, February 2021.

[2] Amir Sarreshtehdari, *The impact of fire following earthquake on urban environment considering the seismic performance of infrastructure networks*, successfully defended on May 7, 2021.

M.S. degree

[1] Chenyang Fang, *Performance-based fire design and the US prescriptive guidelines: A comparative study,* June 2017.

[2] Fernando Jose Szasdi Bardales, *Understanding wildfire spread in wildland-urban interface communities,* June 2019.

[3] Mohammad Moeini (Co-advised with Dr. Pinar Okumus), *Finite element study on the lateral behavior of tessellated structural-architectural reinforced concrete shear walls*, February 2020.

[4] Mohamed Ezz Abdelmoneim Elsayed, (Co-advised with Dr. Pinar Okumus), *Structural modeling of a medium density fiberboard tessellated beam*, August 2020.

[5] Juan Gustavo Salado Castillo (Co-advised with Dr. Michel Bruneau), *Seismic Resilience Quantification for a Set of Buildings*, August 2020.

Dissertation/thesis in progress

[1] Nan Hua (Co-advised with Dr. Anthony Tessari), Ph.D., *Structural fire resistance of tunnels considering soil and concrete liner interaction*, started Fall 2017, expected graduation in August 2021.

[2] Mohammad Syed (Co-advised with Dr. Pinar Okumus), Ph.D., *Tessellated structural-architectural systems for rapid construction, repair, and disassembly*, started Fall 2019, expected graduation in August 2022.

[3] Rodrigo Napoleon Castillo Perez (Co-advised with Dr. Pinar Okumus), Ph.D., *Evaluating condition of in-service structures*, started Fall 2019, expected graduation in 2023.

[4] Fernando Jose Szasdi Bardales, Ph.D., *Wildfire risk assessment in wildland-urban interface communities*, to start August 2021.

Special achievements of graduate students

- Nan Hua: SEAS Dean's Graduate Achievement Award, UB, 2021
- Ramla Qureshi: Best paper award and best presentation award at the 11th International Structures in Fire Conference, 2020
- Amir Sarreshtehdari: Graduate leadership award, CSEE, UB, 2020
- Nan Hua: Finalist for ACI Foundation fellowship, 2020
- Amir Sarreshtehdari: Third place presentation award, EERI competition, CSEE, UB, 2019
- Ramla Qureshi: American Association of University Women (AAUW) Fellowship, 2019-2020
- Fernando Jose Szasdi Bardales: Travel, research, and educational experience (TREE) grant, Association for Fire Ecology (AFE), April 2019
- Ramla Qureshi: SEAS representative at the 6th annual catalyzing advocacy for science and engineering (CASE) workshop in D.C., March 2019
- Ramla Qureshi: Chair's recognition award, CSEE, UB, 2019
- Ramla Qureshi: Best poster award, CSEE, UB, 2018
- Ramla Qureshi: UBEAA leaders in excellence award, UB Alumni Association, UB, 2018
- Ramla Qureshi: Recipient of the Mark Diamond Research Fund, UB, 2017

Visitors

[1] Zheng He, Ph.D. Candidate, Department of Civil Engineering, Central South University, China, Sept 2018-Oct 2020.

[2] Patrick Covi, Ph.D. Candidate, Department of Civil, Environmental and Mechanical Engineering, University of Trento, Italy, May-Oct 2020. Travel to UB was canceled due to COVID-19, weekly remote meetings were arranged to conduct the research.

Doctoral committees

[1] Alok Abhay Deshpande, Department of Civil, Structural and Environmental Engineering, University at Buffalo, Fall 2016-Spring 2019.

[2] Zheda Zhu, Department of Civil and Environmental Engineering, Lehigh University, Spring 2017-Spring 2020.

[3] Max Coar, Department of Civil and Environmental Engineering, Princeton University, Fall 2017-expected conferral date August 2021.

[4] Dhanendra Kumar, Department of Civil, Structural and Environmental Engineering, University at Buffalo, Fall 2018-February 2021.

[5] Kaivalya Lal, Department of Civil, Structural and Environmental Engineering, University at Buffalo, February 2021-present.

Dissertation examiner
[1] Xianoe Wei, Ph.D. defense committee, Department of Civil, Structural and Environmental Engineering, University at Buffalo, July 2016.

[2] Ramla Qureshi, M.S. thesis examiner, Department of Civil, Structural and Environmental Engineering, University at Buffalo, August 2016.

[3] Mohammad Syed, M.S. thesis examiner, Department of Civil, Structural and Environmental Engineering, University at Buffalo, May 2019.

[4] Patrick Covi, Ph.D. defense external referee, Department of Civil, Environmental and Mechanical Engineering, University of Trento, Italy, May 2021.

Undergraduate research students
[1] Jarlene Rojas, *Quantifying lifeline dependencies under extreme hazards*, LSAMP Summer Research Internship Program, Summer 2016.

[2] Aysegul Sagmal, *Collecting an inventory and harmonizing bridge fragility curves for post-earthquake community assessment*, Spring 2017.

[3] Derek Johnson, *Post-blast fire resistance of low-rise buildings through membrane action of a composite floor*, Spring 2017.

[4] Akirah Matthews, *Compiling bridge fragility curves to assess seismic vulnerability*, LSAMP Summer Research Internship Program, Summer 2017.

- Selected to attend the 2017 LSMCE conference based on the research poster presentation

[5] Nayana Sreekumar, *Fundamentals of hybrid fire testing*, Summer Research Assistantship Program, Summer 2017.

[6] Anshul Yadav, *Fundamentals of fire engineering,* Summer Research Assistantship Program, Summer 2018.

[7] Jonathan Mann (co-advised with Dr. Pinar Okumus), *Fragility functions for tessellated structural-architectural systems*, NSF Research Experiences for Undergraduates (REU) program, Summer 2019.

[8] Esther Saula, *Digitized fuel load survey methodology*, LSAMP Summer Research Internship Program, Summer and Fall 2019.

[9] Gauhar Nurlybekova, *Digitized fuel load survey methodology*, Kazakhstan exchange student, Summer Research Assistantship Program, Summer 2019.

[10] Riley Blasiak (co-advised with Dr. Pinar Okumus), *Small-scale testing of 3D printed TeSA shear walls*, NSF Research Experiences for Undergraduates (REU) program, January 2021.

[11] James Lang (co-advised with Dr. Pinar Okumus), *Small-scale testing of 3D printed TeSA shear walls*, NSF Research Experiences for Undergraduates (REU) program, January 2021.

TEACHING EXPERIENCE

Instructor – University at Buffalo
CIE500/CIE522 Design of Structures for Fire:
Spring 2017 (#students: 32), Spring 2018 (#students: 17), Spring 2019 (#students: 22),
Spring 2020 (#students: 14), Spring 2021 (#students: 21)

CIE428 Steel Design:
Fall 2016 (#students: 93), Fall 2017 (#students: 51), Fall 2018 (#students: 63),
Fall 2019 (#students: 42), Fall 2020 (#students: 47)

CIE324 Structural Engineering II:
Spring 2016 (#students: 48)

Instructor - Princeton University
MATLAB Workshop, Fall 2014

Assistant Instructor - Princeton University
CEE262 Structures and the Urban Environment – Course administrator, Spring 2015
CEE366 Reinforced Concrete Design, Fall 2011, 2012, 2014
CEE 461 Design of Large Scale Structures – Buildings, Spring 2013, 2014, 2015
CEE 361/MAE 325 Matrix Structural Analysis and Introduction to Finite-Element Methods, Fall 2012

Teaching Assistant – University of Toronto
CIV357 Building Design, 2010
CIV100 Mechanics, Fall 2009
CIV313 Design of Reinforced Concrete Structures, Spring 2009
CIV102 Structures and Materials, an introduction to design, Fall 2008

PROFESSIONAL ACTIVITIES

Leadership
Conference session organizer for two sessions (a total of 10 abstracts) on "Characterizing Uncertainties in Response of Structures and Communities to Fire Hazard", the Engineering Mechanics Institute (EMI) Conference and Probabilistic Mechanics and Reliability Conference, New York, NY, May 2021 (held online due to COVID-19).

Conference session organizer for two sessions (a total of 24 abstracts) on "Earthquake Resilience and Cascading Effects and Emerging Topics" and "New Developments in Structural Fire Engineering", the Engineering Mechanics Institute (EMI) Conference, Pasadena, CA, June 2019.

Conference session organizer for a session on Structural-Fire Engineering: Past, Present, and Future, the Engineering Mechanics Institute (EMI) Conference, Boston, MA, June 2018.

ASCE Fire Protection Committee, Lead of Fire Following Earthquake Task Group, preparing a committee report on performance-based design for fire following earthquake. September 2017-present.

Organizing Committee, 9th International Conference on Structures in Fire (SiF), Princeton, NJ, June 2016.

Organizing Committee, Princeton Research Symposium, Princeton, NJ, June 2013.

Other services
NSF reviewer for the CMMI Humans, Disasters, and Built Environment program, 2020.

Proposal reviewer for the Research Grants Council (RGC) of Hong Kong, 2019, 2020.

Proposal reviewer for the Icelandic Research Fund, 2019.

Journal Reviewer (a total of 60 reviews): Fire Safety Journal (8); Engineering Structures (7); Fire Technology (6); Journal of Constructional Steel Research (5); Journal of Structural Engineering (5); Fire and Materials (4); Sustainable and Resilient Infrastructure (4); Journal of Structural Fire Engineering (3); Advances in Structural Engineering (3); Structural Engineering International (2); Soil Dynamics and Earthquake Engineering (2); Bulletin of Earthquake Engineering (1); Canadian Journal of Civil Engineering

(1); Structural Safety (1); Journal of Earthquake Engineering (1); Automation in Construction (1); Journal of Environmental Management (1); Journal of Engineering Mechanics (1); Thin-Walled Structures (1); Data in Brief (1); Structure and Infrastructure Engineering (1), Challenges (1).

Article Editor: SAGE Open.

Membership in professional societies
SEAoNY Resilience Committee, 2020-present

ASCE Life-Cycle Performance, Safety, Reliability and Risk of Structural Systems, Task Group 2 on Reliability-based Performance for Structural Systems, 2020-present

Joint Committee on Structural Safety (JCSS), providing input for updating the background document on fire for the Working Group 1: The Probabilistic Model Code, 2020-present

International Federation for Structural Concrete (fib) Task Group 2.3 on Fire Design of Concrete Structures, 2019-present

International Association for Fire Safety Science (IAFSS) Large Outdoor Fires and the Built Environment working groups, 2018-present

ASCE Fire Protection Committee, 2017-present

UNIVERSITY SERVICE

Department committees
Member, CSEE Structures Curriculum Committee, University at Buffalo, Department of Civil, Structural and Environmental Engineering, February 2021-present

Member, Undergraduate Studies Committee, University at Buffalo, Department of Civil, Structural and Environmental Engineering, September 2016-present

Other services
Freshman Mentor Program, EAS202, University at Buffalo, Department of Civil, Structural and Environmental Engineering, Spring 2016, 2017, 2018, 2019, 2020, 2021

Faculty Judge for the Annual CSEE Poster Competition, Spring 2016, 2018, 2019, 2020

OUTRESEARCH ACTIVITES

Structural Engineering and Earthquake Simulation Laboratory (SEESL) tours, provide regular tours of SEESL, for example, as part of (a) Tinker Camp for high school students promoting women in engineering Summer 2018, and (b) CSE Explore event for high school girls, Summer 2018 and 2019.

WiSE Event Accepted Students Day, presented "The Idea of Structures as Art" with a set of demonstrations to provide an overview of how innovative structural forms and systems can be used to resist different loads; this event also offered a tour of the UB SEESL, March 2018.

SC Governor's school for science and mathematics, South Carolina, Fall 2017, presented an online lecture to engineering high school students about bridge fires. The focus of the talk was how various engineering disciplines can make contributions to the field of transportation.

Science in Elementary Program at Westminster School, Buffalo, Spring 2017, working with UB volunteers at a local K-8 school with the majority of students from minority and underprivileged sections of our community. Through hands-on experiments, this program aims to facilitate self-learning of science among the school students. (http://www.elementaryschoolscience.org/)