

Cameron A. MacKenzie

3029 Black Engineering, Ames, Iowa 50011 • Phone: 515-294-3524

Email: camacken@iastate.edu • <http://www.imse.iastate.edu/directory/faculty/cameron-a-mackenzie/>

EDUCATION

Ph.D., School of Industrial Engineering, University of Oklahoma, 2012

Dissertation: *Interdependent Impacts of Disruption Management: Risk-Based Applications to Port Closures, Natural Disasters, and Oil Spills*

M.S., Department of Management Science and Engineering, Stanford University, 2009

M.A., School of International Affairs, The George Washington University, 2003

B.S., Department of Mathematics, Indiana-Purdue University at Fort Wayne, 2001

B.A., Department of History and Department of French, Indiana-Purdue University at Fort Wayne, 2001

PROFESSIONAL WORK EXPERIENCE

2015 – present Assistant Professor, Department of Industrial and Manufacturing Systems Engineering
Iowa State University

2016 – present Research Associate, Simulation, Modeling and Decision Science Group, Ames Lab

2012 – 2015 Assistant Professor, Defense Resources Management Institute
Naval Postgraduate School

2009 – 2012 Graduate Research Assistant, School of Industrial Engineering
University of Oklahoma

Summer 2011 Summer Doctoral Institute Fellow
Center for International Business Education and Research, School of Business
The George Washington University

Summer 2007 Summer Associate, The RAND Corporation

2003 – 2006 Senior Associate, The Cohen Group

PAPERS

Journal Publications

MacKenzie, C.A., H. Baroud, and K. Barker. 2016. "Optimal Resource Allocation for Recovery of Interdependent Systems: Application to the *Deepwater Horizon* Oil Spill." *Annals of Operations Research* 236 (1): 103-129.

MacKenzie, C.A. and C.W. Zobel. 2016. "Allocating Resources to Enhance Resilience, with Application to Superstorm Sandy and an Electric Utility." *Risk Analysis* 36 (4): 847-862.

- Gallagher, M.A., D.A. Boerman, C.A. MacKenzie, and D.M. Blum. 2016. "Improving Risk Assessment Communication." *Military Operations Research Journal* 21 (1): 5-20.
- MacKenzie, C.A. 2014. "Summarizing Risk Using Risk Measures and Risk Indices." *Risk Analysis* 34 (12): 2143-2162.
- MacKenzie, C.A., K. Barker, and J.R. Santos. 2014. "Modeling a Severe Supply Chain Disruption and Post-Disaster Decision Making with Application to the Japanese Earthquake and Tsunami." *IEEE Transactions* 46 (12): 1243-1260.
- MacKenzie, C.A., T.B. Trafalis, and K. Barker. 2014. "Non-Gaussian Bayesian Kernel Methods for Binary and Online Learning Problems." *Statistical Analysis and Data Mining* 7 (6): 434-449.
- Maalouf, M., C.A. MacKenzie, S. Radakrishnan, and M. Court. 2014. "A New Fuzzy Logic Approach to Capacitated Dynamic Dial-a-Ride Problem." *Fuzzy Sets and Systems* 255: 30-40.
- MacKenzie, C.A. and K. Barker. 2013. "Empirical Data and Regression Analysis for Estimation of Infrastructure Resilience, with Application to Electric Power Outages." *Journal of Infrastructure Systems* 19 (1): 25-35.
- Winterstein, S.R. and C.A. MacKenzie. 2013. "Extremes of Nonlinear Vibration: Models Based on Moments, L-Moments, and Maximum Entropy." *Journal of Offshore Mechanics and Arctic Engineering* 135 (2): 021602.1-021602.7.
- MacKenzie, C.A., K. Barker, and F.H. Grant. 2012. "Evaluating the Consequences of an Inland Waterway Port Closure with a Dynamic Multiregional Interdependency Model." *IEEE Transactions on Systems, Man, and Cybernetics, Part A: Systems and Humans* 42 (2): 359-370.
- MacKenzie, C.A., J.R. Santos, and K. Barker. 2012. "Measuring Changes in International Production from a Disruption: Case Study of the Japanese Earthquake and Tsunami." *International Journal of Production Economics*. 138 (2): 293-302.
- MacKenzie, C.A. 2010. "Book Review on Douglas Hubbard, *Failure of Risk Management: Why It's Broken and How to Fix It*." *Risk Analysis* 30 (2): 524-525.
- MacKenzie, C.A. 2002. "Building Democracy in Pakistan." *Journal of Public and International Affairs*, 13: 104-122.

Papers in Press (* indicates graduate student author)

MacKenzie, C.A. and A. Apte. 2016. "Modeling Disruption in a Fresh Produce Supply Chain." In press. *International Journal of Logistics Management*.

Sonar, A.* and C.A. MacKenzie. 2016. "Supply Chain Disruption Preparedness Measures Using Wagner-Whitin Model." In press. To appear in Y. Khojasteh, ed., *Supply Chain Risk Management: Advanced Tools, Models, and Developments*. Springer.

Vinayak, A.* and C.A. MacKenzie. 2016. "Quantitative Model for Analyzing Market Response During Supply Chain Disruptions." In press. To appear in Y. Khojasteh, ed., *Supply Chain Risk Management: Advanced Tools, Models, and Developments*. Springer.

Book Chapters (* indicates student author)

Everly, R.E.*, D.C. Limmer*, and C.A. MacKenzie. 2015. "Cost-Effectiveness Analysis of Autonomous Aerial Platforms and Communication Payloads." In F. Melese, A. Richter, and B. Solomon, eds., *Military Cost-Benefit Analysis: Theory & Practice*. New York: Routledge, 401-423. (This chapter comes from Everly and Limmer's master thesis, which I advised.)

Wall, K.D. and C.A. MacKenzie. 2015. "Multiple Objective Decision Making." In F. Melese, A. Richter, and B. Solomon, eds., *Military Cost-Benefit Analysis: Theory & Practice*. New York: Routledge, 197-236.

Papers in Submission (* indicates graduate student author)

MacKenzie, C.A. and C. Hu. 2016. "Decision Making under Uncertainty for Design of Resilient Engineered Systems." Under review.

Guo, X.* and C.A. MacKenzie. 2016. "Optimal Bidding Strategy for GENCO with Green Power in Day-ahead Electricity Market." Under review.

Lei, X.* and C.A. MacKenzie. 2016. "Assessing the Reliability of Hybrid Vehicle System: Application to the 2004 Toyota Prius." Under review.

Regnier, E. and C.A. MacKenzie. 2016. "The Hurricane Decision Simulator: A Tool for Marine Forces in New Orleans to Practice Operations Management in Advance of a Hurricane. Under revision.

Voelker, M.S.*, C.A. MacKenzie, and F.E. Peters. 2016. "Risk Assessment on Visual Inspection Methods for Cast Metal Surfaces." Under revision.

Conference Proceedings (* indicates graduate student author, ** indicates undergraduate student author)

Al Kazimi, A.** and C.A. MacKenzie. 2016. "The Economic Costs of Natural Disasters, Terrorist Attacks, and Other Calamities: An Analysis of Economic Models that Quantify the Losses Caused by Disruptions." In *Proceedings of the 2016 Systems and Information Engineering Design Symposium*. Systems and Information Engineering Design Symposium. April, Charlottesville, Virginia, pp. 32-37.

Du, Y.*, M. Dorneich, B. Steward, and C.A. MacKenzie. 2016. "A Bayesian-Influence Model for Error Probability Analysis of Combine Operations in Harvesting. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*. Human Factors and Ergonomics Society Annual Meeting, September, Washington, D.C., pp. 1414-1418.

MacKenzie, C.A. and E. Regnier. 2015. "A Hurricane Decision Simulator for the U.S. Marine Corps Reserve Forces in New Orleans." In *Proceedings of the Western Decision Sciences Institute Annual Meeting*. Western Decision Sciences Institute Annual Meeting, March-April, Maui, Hawaii.

MacKenzie, C.A. 2013. "Optimal Resource Allocation for Preparedness and Recovery of Interdependent Systems." In *Proceedings of the Western Economics Association International Annual Conference*, Western Economics Association International Annual Conference, June, Seattle, Washington.

Baroud, H., K. Barker, R. Lurvey, and C.A. MacKenzie. 2013. "Bayesian Kernel Models for Disruptive Event Data." In A. Krishnamurthy and W.K.V. Chan, eds. *Proceedings of the 2013 Industrial and Systems Engineering Research Conference*. Institute for Industrial Engineers (IIE) Annual Meeting and Expo, May, San Juan, Puerto Rico.

- MacKenzie, C.A., H. Baroud, and K. Barker. 2012. "Optimal Resource Allocation for Recovery of Interdependent Systems: Case Study of the *Deepwater Horizon* Oil Spill." In G. Lim and J.W. Herrmann, eds. *Proceedings of the 2012 Industrial and Systems Engineering Research Conference*. IIE Annual Meeting and Expo, May, Orlando, Florida.
- Maalouf, M., C.A. MacKenzie, S. Radakrishnan, and M. Court. 2012. "A New Fuzzy Logic Approach to Dynamic Dial-a-Ride Problem." In G. Lim and J.W. Herrmann, eds. *Proceedings of the 2012 Industrial and Systems Engineering Research Conference*. IIE Annual Meeting and Expo, May, Orlando, Florida.
- MacKenzie, C.A. and K. Barker. 2011. "Conceptualizing the Broader Impacts of Industry Preparedness Strategies with a Risk-Based Input-Output Model." In *Proceedings of the 19th International Input-Output Conference*. International Input-Output Association, June, Alexandria, Virginia. Access <http://www.iioa.org/Conference/19th-downable%20paper.htm>.
- MacKenzie, C.A. and S.R. Winterstein. 2011. "Comparing L-Moments and Conventional Moments to Model Current Speeds in the North Sea." In T. Doolen and E. Van Aken, eds. *Proceedings of the 2011 Industrial Engineering Research Conference*. IIE Annual Meeting and Expo, May, Reno, Nevada.
- Winterstein, S.R. and C.A. MacKenzie. 2011. "Extremes of Nonlinear Vibration: Models Based on Moments, L-Moments, and Maximum Entropy." In *Proceedings of the 30th International Conference on Ocean, Offshore and Arctic Engineering*. OMAE 2011, June, Rotterdam, Netherlands.
- Conference and Seminar Presentations** (* indicates graduate student author, ** indicates undergraduate student author)
- Lei, X.* and C.A. MacKenzie. 2016. "Reliability of Hybrid Vehicle System: 2004 Toyota Prius Hybrid Vehicle." Society for Risk Analysis (SRA) Annual Meeting, December, San Diego, California. (Finalist for Engineering and Infrastructure Specialty Group student merit award.)
- Zhang, M.* and C.A. MacKenzie. 2016. "Analyzing Different Decision-Making Methods for Situations with Deep Uncertainty." SRA Annual Meeting, December, San Diego, California.
- MacKenzie, C.A. and L. Yao. 2016. "Resource Allocation Decisions with Deep Uncertainty." Institute for Operations Research and the Management Sciences (INFORMS) Annual Meeting, November, Nashville, Tennessee.
- Regnier, E. and MacKenzie, C.A. 2016. "Hurricane Decision Simulator." INFORMS Annual Meeting, November, Nashville, Tennessee.
- MacKenzie, C.A. 2016. "Enhancing Decision Making Through Narrative and Simulation." Seminar at Argonne National Laboratory, October, Lemont, Illinois.
- MacKenzie, C.A., K. Bryden, and A. Prisacari. 2016. "Integrating Narrative into Engineering Decision Making." Resilience Week, August, Chicago, Illinois.
- MacKenzie, C.A. and E. Regnier. 2016. "The Online Hurricane Decision Simulator." Institute for Industrial and Systems Engineers Annual Conference and Expo, May, Anaheim, California.
- MacKenzie, C.A. and A. Apte. 2016. "Modeling Disruption in a Fresh Produce Supply Chain." Production Operations Management Society Annual Conference, May, Orlando, Florida.

- Al-Kazimi, A.** and C.A. MacKenzie. 2016. "The Economic Costs of Natural Disasters, Terrorist Attacks, and Other Calamities: An Analysis of Economic Models That Quantify the Losses Caused by Disruptions." Systems and Information Engineering Design Symposium, April, Charlottesville, Virginia.
- MacKenzie, C.A. 2016. "Industrial Engineering Solutions to Non-Industry Problems: How Industrial Engineering Methods Are Being Applied to Healthcare, Humanitarian Aid, Public Policy, and Sports." Presentation to the Iowa State student chapter of IIE, Iowa State University, March, Ames, Iowa.
- MacKenzie, C.A. 2015. "How Much Should We Spend on Preparing for Disruptions?" SRA Annual Meeting, December, Arlington, Virginia.
- MacKenzie, C.A. 2015. "How I Learned to Stop Worrying and Love Disruptions." Presentation to the Industrial and Manufacturing Systems Engineering graduate seminar, Iowa State University, November, Ames, Iowa.
- MacKenzie, C.A. 2015. "How Much Should We Spend on Preparing for Disruptions?" INFORMS Annual Meeting, November, Philadelphia, Pennsylvania.
- MacKenzie, C.A. and C.W. Zobel. 2015. "Allocating Resources to Enhance Resilience, with Application to Superstorm Sandy." INFORMS Annual Meeting, November, Philadelphia, Pennsylvania.
- MacKenzie, C.A. and C.W. Zobel. 2015. "Optimization Model to Increase Resilience, with Application to the Electric Power Network." SafeLife-X Final Conference, June, Brussels, Belgium.
- MacKenzie, C.A. 2015. "Resilience Course: State-of-the-art, Basic Principles, Approaches and Theoretical Background, Methods, Tools, Indicators." SafeLife-X Final Conference, June, Brussels, Belgium.
- Regnier, E. and C.A. MacKenzie. 2015. "A Hurricane Decision Simulator for the U.S. Marine Corps Reserve Forces in New Orleans." Western Decision Sciences Institute Annual Meeting, April, Maui, Hawaii.
- MacKenzie, C.A. and C.W. Zobel. 2014. "Allocating Resources to Enhance Resilience." SRA Annual Meeting, December, Denver, Colorado.
- MacKenzie, C.A. and A. Apte. 2014. "Model of Supply Chain Vulnerability for Fresh Produce." INFORMS Annual Meeting, November, San Francisco, California.
- MacKenzie, C.A. 2014. "Allocating Resources to Enhance Resilience." IIE Annual Conference and Expo, June, Montreal, Canada.
- MacKenzie, C.A. 2013. "Trading Off Allocating Resources to Prevent, Prepare for, and Respond to Disruptions." INFORMS Annual Meeting, October, Minneapolis, Minnesota.
- MacKenzie, C.A. 2013. "Deploying Simulation to Compare among Different Risk Reduction Strategies for Supply Chains." INFORMS Annual Meeting, October, Minneapolis, Minnesota.
- MacKenzie, C.A. 2013. "Optimal Resource Allocation for Preparedness and Recovery of Interdependent Systems." Western Economic Association International Annual Conference, June, Seattle, Washington.

- MacKenzie, C.A., K. Barker, and J.R. Santos. 2012. "A Simulation of Severe International Supply Chain Disruptions." Poster platform session, SRA Annual Meeting, December, San Francisco, California.
- MacKenzie, C.A., and K. Barker. 2012. "Disruption Management during Supply Chain Disruptions." INFORMS Annual Meeting, October, Phoenix, Arizona.
- MacKenzie, C.A. and K. Barker. 2012. "Optimal Resource Allocation for Preparedness and Recovery of Interdependent Systems." INFORMS Annual Meeting, October, Phoenix, Arizona.
- MacKenzie, C.A., H. Baroud, and K. Barker. 2012. "Optimal Resource Allocation for Recovery of Interdependent Systems." Industrial and Systems Engineering Research Conference, May, Orlando, Florida.
- MacKenzie, C.A., K. Barker, and J.R. Santos. 2012. "A Simulation of Severe International Supply Chain Disruptions." Industrial and Systems Engineering Research Conference, May, Orlando, Florida.
- MacKenzie, C.A. and K. Barker. 2011. "Optimal Resource Allocation for Recovery from Multimodal Transportation Disruptions." SRA Annual Meeting, December, Charleston, South Carolina.
- MacKenzie, C.A. and K. Barker. 2011. "Quantifying the Interdependent Effects of Supply Chain Disruptions and Industry Preparedness Mitigation Strategies." INFORMS Annual Meeting, November, Charlotte, North Carolina.
- MacKenzie, C.A. and K. Barker. 2011. "International Economic Impacts of Supply Chain Disruptions." INFORMS Annual Meeting, November, Charlotte, North Carolina.
- MacKenzie, C.A. and K. Barker. 2011. "Optimal Resource Allocation for Recovery of Interdependent Systems." INFORMS Annual Meeting, November, Charlotte, North Carolina.
- MacKenzie, C.A. and K. Barker. 2011. "Modeling Interdependent Impacts of Industry Preparedness Strategies." Industrial Engineering Research Conference, May, Reno, Nevada.
- MacKenzie, C.A. and K. Barker. 2010. "Integrating Simulation with Risk-based Interdependency Modeling to Evaluate the Consequences of an Inland Waterway Port Closure." SRA Annual Meeting, December, Salt Lake City, Utah.
- MacKenzie, C.A. and T.B. Trafalis. 2010. "Bayesian Kernel Models for Non-Gaussian Processes." INFORMS Annual Meeting, November, Austin, Texas.
- MacKenzie, C.A., K. Barker, and T.L. Landers. 2010. "Effect of Alternative Shipping Strategies after an Inland Port Closure." Industrial Engineering Research Conference, June, Cancun, Mexico.
- MacKenzie, C.A. 2009. "Applying Flexibility and Robustness to Emergency Preparedness." Technology Management Program, June, Vancouver, Canada.
- MacKenzie, C.A. 2008. "Constructing a Risk Index." SRA Annual Meeting, December, Boston, Massachusetts.
- MacKenzie, C.A. and H. Willis. 2008. "All Along the Watchtower: Using Risk Analysis to Evaluate Potential Solutions to Border Surveillance." Risk Symposium, Los Alamos National Laboratory, March, Santa Fe, New Mexico.

MacKenzie, C.A., A. Lantsberg, and L. Salmon. 2007. "Risks of a Dirty Bomb in the U.S." National Security Seminar, Carnegie Mellon University, August, Pittsburgh, Pennsylvania.

FUNDED RESEARCH PROJECTS

- 2016 – present Measuring the Effectiveness of the Hurricane Decision Simulator. Ames Lab: PI, Cameron MacKenzie. Naval Postgraduate School. \$20,000.
- 2015 – 2016 Airplane Planning Capacity and Planning Tool for Boeing Analytics Scholars. Iowa State University: PI, Carolyn Krejci; Co-PI, Cameron MacKenzie; Co-PI, John Jackman; Co-PI, Guiping Hu. The Boeing Company. \$79,408.
- 2014 – 2015 Marine Forces Reserve Hurricane Simulator Training Tool. Naval Postgraduate School: PI, Andy Hernandez; Co-PI, Cameron MacKenzie; Co-PI, Eva Regnier. Marine Forces Reserve. \$31,000.
- 2013 – 2014 Evaluating Measures of Effectiveness for Security Cooperation Programs. Naval Postgraduate School: Researchers, Cameron MacKenzie and Francois Melese. Defense Security Cooperation Agency. \$70,000.
- 2012 – 2013 Bayesian Kernel Methods for Non-Gaussian Distributions: Binary and Multi-class Classification Systems. University of Oklahoma: PI, Kash Barker; Co-PI, Theodore Trafalis; Senior/key personnel, Cameron MacKenzie. U.S. Army Research, Development and Engineering Command, Army Research Office, Mathematical Sciences Division. \$50,000.

TEACHING EXPERIENCE

Assistant Professor, Iowa State University

Engineering Risk Analysis (Fall 2015)
Engineering Economic Analysis (Spring 2016, Spring 2017)
Continuous Quality Improvement of Process (Fall 2016)

Assistant Professor, Naval Postgraduate School (each course is taught by a team of professors)

Defense Resources Management Course (multiple times 2012-2015)
International Defense Resources Management Course (multiple times 2012-2015)
Multi-Criteria Decision Making (October 2012, November 2013, October 2014)
Senior International Defense Resources Management Course (July 2013, August 2014)
Risk Management (April 2013, January 2014, January 2015)
Naval Air Systems Command Leadership Development Program Capstone (multiple times, 2014-2015)

Co-instructor, University of Oklahoma

Applied Engineering Statistics (Spring 2012)
Risk & Decision Analysis (Fall 2011)

Teaching Assistant, University of Oklahoma

Engineering Experimental Design (Fall 2011)

Teaching Assistant, Stanford University

Engineering Risk Analysis (Winter 2008, Winter 2009)

Project Course for Risk Analysis (Spring 2008, Spring 2009)
Simulation (Spring 2009)

GRADUATE STUDENT ADVISING

Ph.D. Student

Lei Yao. Spring 2019 (expected).

Ramin Giahi. Fall 2020 (expected).

Mohammadkazem Sadoughi (Mechanical Engineering Ph.D. student with Chao Hu as major professor. I am a co-advisor)

Master's Students

Iowa State University

Xue Lei. Spring 2017 (expected). *Dynamic Fault Trees for Supply Chain Risk Management.*

Vishnu Parthasarathy. Fall 2017 (expected). *Risk Assessment of Manufacturing Process.*

Aditya Pathak. Summer 2017 (expected). *A New Dynamic Input-Output Model for Disruptions Based on Stock Market Returns.*

Sarat Sivaprasad. Summer 2017 (expected). *Decision Making with Utilities, Probabilities, and Intervals.*

Alexandria Stewart. Spring 2017 (expected). *An Agent-Based Simulation Model for Active Shooter Situations.*

Arun Vinayak. Spring 2017 (expected). *Supplier Risk Assessment.*

Minxiang Zhang. Spring 2017 (expected). *Long-term Decision Making under Uncertainty.*

Naval Postgraduate School

Capt. Amanda Nerg, U.S. Air Force, and CPT Kristie M. Stuckenschneider, U.S. Army. Winter 2014. *Domestic Disasters and Geospatial Technology for the Defense Logistics Agency.*

Capt. Michael Tozzollo, U.S. Marines Corps, Summer 2014. *Analysis of United States Foreign Military Financing to Israel: Should the United States Modify the Military Aid?*

LCDR Randall E. Everly, U.S. Navy, and LT David C. Limmer, U.S. Navy, Spring 2013 (joint thesis). *Cost-Effectiveness Analysis of Aerial Platforms and Suitable Communication Payloads.*

SERVICE

Iowa State University

Public Relations Committee (2016 – present)

Systems Engineering and Engineering Management Graduate Program Committee (2015 – present)

Board of Regents Review Committee (2015 – 2016)

Reviewer

NSF panel reviewer, 2016

IIE Transactions
Reliability Engineering & System Safety
IEEE Transactions on Systems, Man, and Cybernetics, Part A: Systems and Humans
IEEE Transactions on Power Systems
Decision Analysis
Risk Analysis
Annals of Operations Research
European Journal of Operations Research
Journal of Cognitive Engineering and Decision Making
International Journal of Logistics Management
International Journal of Production Economics
Environment Systems and Decisions
International Journal of Disaster Risk Reduction
Journal of Cleaner Production
Energies
IEEE Homeland Security Technologies Conference
International Conference on Information Systems for Crisis Response and Management
Reviewed major international research proposal for the Singapore National Research Foundation

Conferences

Session organizer on infrastructure risks for 2016 Society for Risk Analysis (SRA) Annual Meeting
Session organizer on decision making in public policy for 2016 Institute for Operations Research and the Management Sciences (INFORMS) Annual Meeting
Session organizer on journal publication tips for 2015 INFORMS Annual Meeting
Working group on product integrity risk for workshop on How Risk Assessments Inform National Security Decision Making hosted by Military Operations Research Society and the Security Analysis and Risk Management Association in October 2014
Session organizer on transportation systems and on homeland security for 2014 Industrial and Systems Engineering Research Conference
Program committee for 2013 SRA Annual Meeting
Poster judge for 2012 and 2013 SRA Annual Meeting
Poster judge for 2013 INFORMS Annual Meeting
Session organizer on risks of transportation disruptions for 2011, 2012, and 2013 SRA Annual Meeting
Session organizer on supply chain disruptions for 2013 INFORMS Annual Meeting

Committees and Clubs

Co-Editor, *Decision Analysis Today*, Decision Analysis Society, INFORMS (2016 – present)
Secretary, Junior Faculty Interest Group, INFORMS (2014 – 2016)
Member of Strategic Planning Committee, Defense Resources Management Institute, Naval Postgraduate School (2014 – 2015)
Chair of Engineering and Infrastructure Specialty Group for SRA (2013)
President of INFORMS chapter at University of Oklahoma (2011 – 2012)
Secretary of INFORMS chapter at Stanford University (2007 – 2009)
Member of Committee for Graduate Studies at Stanford University (2008 – 2009)
Writing mentor for undergraduate course on decision analysis, Stanford University (2008 – 2009)
Senior editor for *Stanford Scientific Magazine* (2006 – 2007)
Vice President for Student-Alumni Initiatives for The George Washington Alumni Association (2005 – 2006)
Representative for Student-Alumni Affairs for The Elliott School Graduate Student Council, The George Washington University (2002 – 2003)

Professional Memberships

SRA (2007 – present)

INFORMS (2009 – present)

Institute for Industrial and Systems Engineers (2010 – present)

Production Operations Management (2016 – present)

Military Operations Research Society (2017 – present)