

# **NOSHIR S. CONTRACTOR**

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[Professor Contractor has delivered over 250 keynotes and distinguished lectures. For details see here.](#)

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## EDUCATION

Ph.D., Communication, University of Southern California, 1987.

M. A., Communication, University of Southern California, 1986.

B. Tech. Electrical Engineering, Indian Institute of Technology, Madras (Chennai), 1983.

## ACADEMIC APPOINTMENTS

- 2007–present     Jane S. & William J. White Professor of Behavioral Sciences  
                            Departments of Communication Studies, Industrial Engineering and  
                            Management Sciences, and Management and Organizations, and Computer  
                            Sciences (By courtesy)  
                            Northwestern University
- 2001-2007        Professor of Speech Communication  
                            University of Illinois at Urbana-Champaign
- 1993-2001        Associate Professor of Speech Communication  
                            University of Illinois at Urbana-Champaign
- 1987-1993        Assistant Professor of Speech Communication  
                            University of Illinois at Urbana-Champaign

## HONORS AND AWARDS

### Distinguished and Career Recognition

Fellow, American Association for the Advancement of Science (AAAS), 2019.

Fellow, The Association for Computing Machinery (ACM), 2019.

Lifetime Service Award, Organizational Communication and Information Systems Division,  
Academy of Management, 2019.

Distinguished Speaker Award, Organizational Communication and Information Systems Division,  
Academy of Management, 2019.

Distinguished Alumnus Award, Indian Institute of Technology, Madras, 2018.

Fellow, International Communication Association, 2015.

Distinguished Scholar Award, National Communication Association, 2014.

Outstanding Member Award, Organizational Communication Division, International Communication Association, 2000.

Institute Gold Medal, Bachelor of Technology, Indian Institute of Technology, Madras, India, 1983.

### **Article and Book Awards**

Fellows Book Award (2021), International Communication Association, for [\*Theories of Communication Networks\*](#) (New York: Oxford University Press, 2003)

Article of the Year Award (2015), Communication Theory and Methodology Division, Association for Education in Journalism and Mass Communication, for Foucault Welles, B., Vashevko, A., Bennett, N., & Contractor, N. (2014). Dynamic models of communication in an online friendship network. *Communication Methods and Measures*, 8(4), 223-243.

Outstanding Scholarly Edited Book Award (2014), Organizational Communication Division, National Communication Association, for Shumate, M., & Contractor, N. (2014). Emergence of multidimensional social networks. In L.L. Putnam & D. Mumby (Eds.), *Handbook of Organizational Communication* (pp. 451-474). Thousand Oaks, CA: Sage.

Ernest Bormann Research Book Award (2013), Group Communication Division, National Communication Association, for Contractor, N., & Su, C. (2012). Understanding groups from a network perspective. In A. Hollingshead & M. S. Poole (Eds.), *Research Methods for Studying Groups and Teams: A Guide to Approaches, Tools, and Technologies* (pp. 284-310). New York: Taylor & Francis/Routledge.

Article of the Year Award (2012), Organizational Communication Division, National Communication Association, for "Whitbred, R., Fonti, F., Steglich, C., & Contractor, N. (2011). From microactions to macrostructure and back: A structural approach to the evolution of organizational networks. *Human Communication Research*, 37(3), 404-433.

Ernest Bormann Research Award (2006), Group Communication Division, National Communication Association for Katz, N., Lazer, D., Arrow, H., & Contractor, N. (2005). The network perspective on small groups: Theory and research. In Poole, M. S. & Hollingshead, A.B. (Eds.), *Theories of Small Groups: Interdisciplinary Perspectives* (pp. 277-312). Newbury Park, CA: Sage.

Outstanding Book Award (2003), Organizational Communication Division, National Communication Association, for Monge, P. R., & Contractor, N. (2003). *Theories of communication networks*. New York: Oxford University Press.

### **Top Paper Awards**

- Top 4 Paper Award (2021), Group Communication Division, International Communication Association, for Gómez-Zarà, D., DeChurch, L. A., & Contractor, N. (2021, May). *Do I Know You? The Effects of Social Capital on Self-Assembled Groups*. Paper presented at the 71st Annual International Communication Association (ICA) Conference, Virtual.
- Top 4 Paper Award (2020), Group Communication Division, National Communication Association, for Wang, Y., Zhang, J., Ding, Z., DeChurch, L. A., & Contractor, N. S. (2020, November). *Dynamics of processes and performance of teams using enterprise social media*. Paper presented at the 106th Annual Convention of the National Communication Association (NCA), Indianapolis, IN.
- Honorable Mention Award (2020) for Gómez-Zarà, D., Guo, M., DeChurch, L. A., & Contractor, N. (2020, April). [\*How displaying team diversity information influences preferences for heterophily\*](#). In Proceedings of the 2020 ACM Conference on Human Factors in Computing Systems (CHI'20), Honolulu, HI.
- Top 4 Paper Award (2017), Organizational Communication Division, International Communication Association, for Fu, J. S., Shumate, M., & Contractor, N. S. (2017, May). *Collective innovation adoption across interorganizational systems: Organizational boundary, social networks, and decision-making status*. Paper presented at the 67th Annual Conference of the International Communication Association, San Diego, CA.
- Top Paper Award (2016), for Wang, M., Huang, Y., Contractor, N., Fu, Y., & Chen, W. (2016, May). *A network approach for understanding and analyzing product co-consideration relations in engineering design*. Paper presented at the 14<sup>th</sup> International Design Conference, Cavtat-Dubrovnick, Croatia.
- Top Paper Award (2015), for Murase, T., Asencio, R., McDonald, J., Poole, M. S., DeChurch, L. A., & Contractor, N. S. (2015, November). *The effect of entrainment of group processes on multiteam system effectiveness*. Paper presented at the Annual Convention of the National Communication Association (NCA), Las Vegas.
- Best Conference Poster Award (2015), for Asencio, R., Huang, Y., DeChurch, L., Contractor, N., Sawant, A., & Murase, T. (2015, July). *The MyDreamTeam builder: A recommender system for assembling & enabling effective teams*. Poster presented at the Interdisciplinary Network Conference for Group Research (INGRoup) Annual Conference, Pittsburgh, PA.
- Top Paper Award (2013), for “McCusker, J. P., Shaikh, A., Contractor, N., Courtney, P., Lee, J., Morgan, G., Tatalovich, Z., Thomas, C., & L. McGuinness, D. L. (2013). *Towards next generation health data exploration: A data cube-based investigation into population statistics for tobacco IT innovation*. *Proceedings of the Hawaii International Conference On System Sciences (HICSS)*.
- Top Paper Award (2011), for Keegan, B., Ahmed, M. A., Williams, D., Srivastava, J., & Contractor, N. (2011, June). *Sic transit gloria mundi virtuali? Promise and peril in the computational*

*social science of clandestine organizing*, ACM Web Science Conference 2011, Koblenz, Germany.

Top 3 Paper Award (2011), Organizational Communication Division, International Communication Association, for *Huang, M., Barbour, J., Su, C., & Contractor, N. S. (2010, June). Why would you save your files in a group folder? A multilevel analysis of contextual influences on information provision to work group digital databases.* 60<sup>th</sup> Annual Conference of the International Communication Association, Singapore.

Carolyn Dexter Paper Award Finalist (2010), for *Huang, M., Huang, Y., Ognyanova, K., Margolin, D., Shen, C., & Contractor, N. S. (2010, August). The effects of diversity and repeat collaboration on team performance in distributed nanoscientist teams*, Academy of Management Annual Conference, Montreal, Canada.

Top Paper Award (2009), for *Wang, J., & Contractor, N. (2009, July). Knowledge seeking and provision in work teams across multiple knowledge areas: A network formulation to test and extend transactive memory theory*, Fourth Annual INGRoup Conference, Colorado Springs, CO.

Top 3 Paper Award (2008), for *Whitbred, R., Fonti, F., Contractor, N., & Steglich, C. (2008, November). From micro-actions to macro-structure: A structural approach to the evolution of organizational networks.* 94<sup>th</sup> Annual Convention of the National Communication Association (NCA), San Diego, CA.

Top 3 Paper Award (2000), Organizational Communication Division, International Communication Association, for *Contractor, N., Wasserman, S., & Faust, K. (2000, June). Testing multi-level, multi-theoretical hypotheses about networks in 21st century organizational forms: An analytic framework and empirical example.* International Communication Association annual convention, Acapulco, Mexico.

Top 3 Paper Award (1998), International Communication Association, for *Contractor, N. S., Whitbred, R., Fonti, F., Hyatt, A., Jones, P., & O'Keefe, B. (1998, July). Self-organizing communication networks in organizations: Validation of a computational model using exogenous and endogenous theoretical mechanisms.* Paper presented at the meeting of the International Communication Association, Jerusalem, Israel.

Top 3 Paper Award (1997), for *Hyatt, A., Contractor, N., & Jones, P. M. (1997, May). Computational organizational network modeling: Strategies and an example.* Paper presented at the meeting of the International Communication Association, Montreal, Canada.

Top 3 Paper Award (1988), Organizational Communication Division, International Communication Association, for *Eisenberg, E. M., Contractor, N. S., & Monge, P. R. (1988). Semantic networks in organizations. Paper presented at the Annual Conference of the International Communication Association, New Orleans, LA.*

**Advisee Dissertation Awards**

Dissertation Adviser, Jacqueline Ng, Best Dissertation Award Finalist, Technology & Innovation Management Division, Academy of Management, 2019.

Dissertation Adviser, Aaron Schechter, Hackman Outstanding Dissertation Award, Interdisciplinary Network of Group Research (INGRoup), 2018.

Dissertation Adviser, Jacqueline Ng, Finalist at the Institute for Operations Research and Management Science (INFORMS) Organization Science Dissertation Proposal Competition, 2017.

Dissertation Adviser, Alina Lungeanu, Graduate Dissertation Award, Northwestern University School of Communication, 2016.

Dissertation Adviser, Sophia Sullivan, Finalist, Alvah H. Chapman Jr. Outstanding Dissertation Award, Network of Leadership Scholars of the Academy of Management, 2015.

Dissertation Adviser, Mengxiao Zhu, Honorable Mention, Richard Hackman Dissertation Award, Interdisciplinary Network for Group Research (INGRoup), 2014.

Dissertation Adviser, Brooke Foucault-Welles, Special Mention Recognition for Dissertation, Communication & Technology Division, International Communication Association, 2013.

Dissertation Co-Adviser, David Huffaker, Winner of the Dordick Dissertation Award, Communication & Technology Division, International Communication Association, 2010.

Dissertation Adviser, Edward Palazzolo, Honorable Mention, Redding Dissertation Award Competition, Organizational Communication Division, International Communication Association, 2004.

**PUBLICATIONS****Patents**

Contractor, N., Gado, H., & Sawant, A. (2020). Systems and Methods for Automatically Identifying Specific Teams of Users to Solve Specific and Real-Time Problems. *U.S. Patent No. 10,795,896*. Evanston, IL: U.S. Patent and Trademark Office.

**Books**

National Academies of Sciences, Engineering, and Medicine, Division of Behavioral and Social Sciences and Education, Board on Behavioral, Cognitive, and Sensory Sciences, & Committee on a Decadal Survey of Social and Behavioral Sciences for Applications to

- National Security. (2019). [\*A Decadal Survey of the Social and Behavioral Sciences: A Research Agenda for Advancing Intelligence Analysis\*](#). National Academies Press.
- Ahmad, M. A., Shen, C., Srivastava, J., and Contractor, N. S. (Eds.). (2014). [\*Predicting real world behaviors from virtual worlds data\*](#). Cham: Springer International Publishing.
- O'Hara, K., Contractor, N. S., Hall, W., Hendler, J. A., & Shadbolt, N. (2013). [\*Web Science: Understanding the emergence of macro-level features on the World Wide Web\*](#). *Now Foundations and Trends®*, 4(2-3), 103-267. [doi:10.1561/18000000017](https://doi.org/10.1561/18000000017)
- Steinfeld, C., Pentland, B. T., Ackerman, M., & Contractor, N. (Eds.) (2007). *Communities and Technologies 2007*. Proceedings of the Third Communities and Technologies Conference, London: Springer London.
- Monge, P. R., & Contractor, N. (2003). [\*Theories of communication networks\*](#). New York: Oxford University Press.

### Refereed Journal Articles

- Bi, Y., Qiu, Y., Sha, Z., Wang, M., Fu, Y., Contractor, N., & Chen, W. (2021). [\*Modeling Multi-Year Customers' Considerations and Choices in China's Auto Market Using Two-Stage Bipartite Network Analysis\*](#). *Networks and Spatial Economics*, [doi:10.1007/s11067-021-09526-9](https://doi.org/10.1007/s11067-021-09526-9)
- Lungeanu, A., McKnight, M., Negron, R., Munar, W., Christakis, N. A., & Contractor, N. S. (2021). [\*Using Trellis software to enhance high-quality large-scale network data collection in the field\*](#). *Social Networks*, 66:171-184. [doi:10.1016/j.socnet.2021.02.007](https://doi.org/10.1016/j.socnet.2021.02.007)
- Birkett, M., Melville, J., Janulis, P., Phillips, G., Contractor, N., & Hogan, B. (2021). [\*Network Canvas: Key decisions in the design of an interviewer-assisted network data collection software suite\*](#). *Social Networks*, 66:114-124. [doi: 10.1016/j.socnet.2021.02.003](https://doi.org/10.1016/j.socnet.2021.02.003)
- Niler, A. A., Mesmer-Magnus, J. R., Larson, L. E., Plummer, G., DeChurch, L. A., & Contractor, N. S. (2020). [\*Conditioning team cognition: A meta-analysis\*](#). *Organizational Psychology Review*, 11(2):144-174. [doi.org/10.1177/2041386620972112](https://doi.org/10.1177/2041386620972112)
- Cedeno-Mieles, V., Hu, Z., Ren, Y., Deng, X., Contractor, N., Ekanayake, S., Epstein, J. M., Goode, B. J., Korkmaz, G., Ramakrishnan, C N., Saraf, P., & Self, N. (2020). [\*Data analysis and modeling pipelines for controlled networked social science experiments\*](#). *PLoS ONE*, 15(11). <https://doi.org/10.1371/journal.pone.0242453>
- Whalen, R., Lungeanu, A., DeChurch, L. A., & Contractor N. (2020). [\*Patent Similarity data and innovation metrics\*](#). *Journal of Empirical Legal Studies*, 17(3), 615-639. <https://doi.org/10.1111/jels.12261>



- Lazer, D. M. J., Pentland, A., Watts, D. J., Aral, S., Athey, S., Contractor, N., Freelon, D., Gonzalez-Bailon, S., King, G., Margetts, H., Nelson, A., Salganik, M. J., Strohmaier, M., Vespignani, A., & Wagner, C. (2020). [Computational social science: Obstacles and opportunities](#). *Science*, 369(6507), 1060–1062. <https://doi.org/10.1126/science.aaz8170>
- Fu, J. S., Schumate, M., & Contractor, N. (2020). [Organizational and individual innovation decisions in an interorganizational system: Social influence and decision-making authority](#). *Journal of Communication*, 70(4), 497-521. <https://doi.org/10.1093/joc/jqaa018>.
- Xie, J., Bi, Y., Sha, Z., Wang, M., Fu, Y., Contractor, N., Gong, L. & Chen, W. (2020). [Data-Driven Dynamic Network Modeling for Analyzing the Evolution of Product Competitions](#). *Journal of Mechanical Design*, 142(3): 031112. [doi.org/10.1115/1.4045687](https://doi.org/10.1115/1.4045687)
- Mell, J. N., DeChurch, L. A., Contractor, N., & Leenders, R. (2019). [Identity asymmetries: An experimental investigation of social identity and information exchange in multiteam systems](#). *Academy of Management Journal*. <https://doi.org/10.5465/amj.2018.0325>
- Cedeno-Mieles, V., Hu, Z., Ren, Y., Deng, X., Adiga, A., Barrett, C., Contractor, N., Ekanayake, S., Epstein, J. M., Goode, B. J., Korkmaz, G., Kuhlman, C. J., Machi, D., Macy, M. W., Marathe, M. V., Ramakrishnan, N., Ravi, S. S., Saraf, P., & Self, N. (2020). [Networked experiments and modeling for producing collective identity in a group of human subjects using an iterative abduction framework](#). *Social Network Analysis and Mining*, 10(1), 11. <https://doi.org/10.1007/s13278-019-0620-8>
- Contractor, N. (2020). On Writing in Communication and Media Studies | [A “Modest Proposal” on Writing That Is Not Modest Enough](#). *International Journal Of Communication*, 14, 4. <https://ijoc.org/index.php/ijoc/article/view/13987/2921>
- Hogan, B., Janulis, P., Phillips II, G., Melville, J., Mustanski, B., Contractor, N., & Birkett, M. (2019). [Assessing the stability of ego-centered networks over time using the digital participant-aided sociogram tool Network Canvas](#). *Network Science*, 1-19. <https://doi.org/10.1017/nws.2019.27>
- Hilbert, M., Barnett, G., Blumenstock, J., Contractor, N., Diesner, J., Frey, S., González-Bailón, S., Lamberson, P.J., Pan, J., Peng, T. W., Shen, C. C., Smaldino, P. E., Atteveldt, W. V., Waldher, A., Zhang, J., Zhu, J. J. H. (2019). [Computational communication science: A methodological catalyzer for a maturing discipline](#). *International Journal of Communication*, 13(0), 23. <https://ijoc.org/index.php/ijoc/article/view/10675>
- Larson, L., Wojcik, H., Gokhman, I., DeChurch, L., Bell, S., & Contractor, N. (2019). [Team performance in space crews: Houston, we have a teamwork problem](#). *Acta Astronautica*, 161, 108–114. <https://doi.org/10.1016/j.actaastro.2019.04.052>
- Kim, M. J., Lee, C., & Contractor, N. S. (2019). [Seniors' usage of mobile social network sites:](#)



- [Applying theories of innovation diffusion and uses and gratifications](#). *Computers in Human Behavior*, 90, 60-73. doi:10.1016/j.chb.2018.08.046
- Gómez-Zará, D., Andreoli, S., DeChurch, L. A., & Contractor, N. S. (2019). [Descubriendo colaboradores en línea: Formando equipos interdisciplinarios en una universidad argentina](#). *Cuadernos.info*, 0(44), 21–41
- Mukherjee, S., Huang, Y., Neidhardt, J., Uzzi, B., Contractor, N., (2019). [Prior shared success predicts victory in team competitions](#). *Nature Human Behaviour*, 3, 74-81. doi:10.1038/s41562-018-0460-y
- Leonardi, P., & Contractor, N. S. (2018, Nov-Dec). [Better people analytics: Measure who they know, not just who they are](#). *Harvard Business Review*, 70–81. <https://hbr.org/2018/11/better-people-analytics#comment-section>
- Lungeanu, A., Carter, S. R., DeChurch, L. A., & Contractor, N. S. (2018). [How team interlock ecosystems shape the assembly of scientific teams: A hypergraph approach](#). *Communication Methods and Measures*, 12(2-3), 174-198. doi:10.1080/19312458.2018.1430756
- Sha, Z., Huang, Y., Fu, J. S., Wang, M., Fu, Y., Contractor, N., & Chen, W. (2018). [A network-based approach to modeling and predicting product co-consideration relations](#). *Complexity*, 2018(3), 1–14. <https://doi.org/10.1080/19312458.2018.1430756>
- Hendler, J. A., Hall, W., & Contractor, N. (2018). [Web science: Now more than ever](#). *IEEE Computer*, 51(6), 12–17. doi:10.1109/MC.2018.2701637
- Schechter, A., Pilny, A., Leung, A., Poole, M. S., & Contractor, N. (2017). [Step by step: Capturing the dynamics of work team process through relational event sequences](#). *Journal of Organizational Behavior*, 2017, 1–19. <https://doi.org/10.1002/job.2247>
- Wax, A., DeChurch, L., & Contractor, N. (2017). [Self-organizing into winning teams: Understanding the mechanisms that drive successful collaborations](#). *Small group research*, 48(6), 665-718. doi:10.1177/1046496417724209
- Norton, W. E., Lungeanu, A., Chambers, D. A., & Contractor, N. (2017). [Mapping the growing discipline of dissemination and implementation science in health](#). *Scientometrics*, 112(3), 1367–1390. doi:10.1007/s11192-017-2455-2.
- Wang, M., Chen, W., Huang, Y., Contractor, N. S. and Fu, Y. (2016). [Modeling customer preferences using multidimensional network analysis in engineering design](#). *Design Science*, 2, 2012-2028. doi:10.1017/dsj.2016.11.
- Pilny, A., Schechter, A., Poole, M. S., & Contractor, N. (2016). [An illustration of the relational event model to analyze group interaction processes](#). *Group Dynamics: Theory, Research, and*

- Practice: Special Issue on Statistical Methods*, 20(3), 181-195. doi:10.1037/gdn0000054
- Ghasemian, F., Zamanifar, K., Ghasem-Aqae, N., & Contractor, N. (2016). [Toward a better scientific collaboration success prediction model through the feature space expansion](#). *Scientometrics*, 108(2), 777-801. doi: 10.1007/s11192-016-1999-x
- Leenders, R. T. A. J., Contractor, N. S., & DeChurch, L. A. (2016). [Once upon a time: Understanding team processes as relational event networks](#). *Organizational Psychology Review*, 6(1), 92–115. doi: 10.1177/204138661557831
- Zhang, C., Phang, C. W., Zeng, X., Wang, X., Xu, Y., Huang, Y., & Contractor, N. (2015). [Circadian rhythms in socializing propensity](#). *PLoS ONE*, 10(9), e0136325. doi: 10.1371/journal.pone.0136325
- Carter, D. R., Asencio, R., Wax, A., DeChurch, L. A., & Contractor, N. S. (2015). [Little teams, big data: Big data provides new opportunities for teams theory](#). *Industrial and Organizational Psychology*, 8(4), 550-555. doi: 10.1017/iop.2015.82
- Tiropanis, T., Hall, W., Crowcroft, J., Contractor, N., & Tassioulas, L. (2015). [Network science, web science and internet science: Comparing interdisciplinary areas](#). *Communications of the ACM*, 58(8), 76-82. doi:10.1145/2699416
- Foucault Welles, B., & Contractor, N. S. (2015). [Individual motivations and network effects: A multi-level analysis of the structure of online social relationships](#). *Annals of the American Academy of Political and Social Science*, 659, 180-190. doi: 10.1177/0002716214565755
- Carter, D., DeChurch, L. A., Braun, M., & Contractor, N. (2015). [Social network approaches to leadership: An integrative conceptual review](#). *Journal of Applied Psychology*, 100(3), 597. doi:10.1037/a0038922
- Sullivan, S. D., Lungeanu, A., DeChurch, L. A., & Contractor, N. S. (2015). [Space, time, and the development of shared leadership networks in multiteam systems](#). *Network Science*, 3(1), 124-155. doi:10.1017/nws.2015.7
- Contractor, N. S., & DeChurch, L. A. (2014). [Integrating social networks and human social motives to achieve social influence at scale](#). *Proceedings of the National Academy of Sciences*, 111(Supplement 4), 13650–13657.
- Foucault Welles, B., Vashevko, A., Bennett, N., & Contractor, N. (2014). [Dynamic models of communication in an online friendship network](#). *Communication Methods and Measures*, 8(4), 223-243. doi:10.1080/19312458.2014.967843
- Lungeanu, A., & Contractor, N. S. (2014). [The effects of diversity and network ties on innovations: The emergence of a new scientific field](#). *American Behavioral Scientist*, 59(5), 548-564. doi:10.1177/0002764214556804

- Foucault Welles, B., Rouse, T., Merrill, N., & Contractor, N. (2014). [Virtually friends: An exploration of friendship claims and expectations in immersive virtual worlds](#). *Journal for Virtual Worlds Research*, 7(2), 1-15. <https://doi.org/10.4101/jvwr.v7i2.7024>
- Lungeanu, A., Huang, Y., & Contractor, N. S. (2014). [Understanding the assembly of interdisciplinary teams and its impact on performance](#). *Journal of Informetrics*, 8(1), 59–70. [doi: 10.1016/j.joi.2013.10.006](https://doi.org/10.1016/j.joi.2013.10.006)
- Tiropanis, T., Hall, W., Shadbolt, N., De Roure, D., Contractor, N., & Hendler, J. (2013). [The Web Science Observatory](#). *Intelligent Systems, IEEE*, 28(2), 100–104. [doi:10.1109/MIS.2013.50](https://doi.org/10.1109/MIS.2013.50)
- O’Hara, K., Contractor, N. S., Hall, W., Hendler, J. A., & Shadbolt, N. (2013). [Web Science: Understanding the emergence of macro-level features on the World Wide Web](#). *Foundations and Trends® in Web Science*, 4(2-3), 103-267. [doi:10.1561/1800000017](https://doi.org/10.1561/1800000017)
- Huang, M., Barbour, J., Su, C., & Contractor, N. (2013). [Why do group members provide information to digital knowledge repositories? A multilevel application of transactive memory theory](#). *Journal of the American Society for Information Science and Technology*, 64(3), 540-557. <https://doi.org/10.1002/asi.22805>
- Contractor, N. (2013). [Some assembly required: Leveraging Web science to understand and enable team assembly](#). *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 371(1987), 20120385–20120385. [doi:10.1098/rsta.2012.0385](https://doi.org/10.1098/rsta.2012.0385)
- Zhu, M., Huang, Y., & Contractor, N. S. (2013). [Motivations for self-assembling into project teams](#). *Social Networks*, 35(2), 251–264. <https://doi.org/10.1016/j.socnet.2013.03.001>
- Huang, Y., Shen, C., & Contractor, N. (2013) [Distance matters: Exploring proximity and homophily in virtual world networks](#). *Decision Support Systems*, 55(4), 969–977. <https://doi.org/10.1016/j.dss.2013.01.006>
- Keegan, B., Gergle, D., & Contractor, N. (2013). [Hot off the Wiki: Structures and dynamics of Wikipedia’s coverage of breaking news events](#). *American Behavioral Scientist*, 57(5), 595-622. <https://doi.org/10.1177/0002764212469367>
- Contractor, N. S., DeChurch, L. A., Carson, J. B., Carter, D., & Keegan, B. (2012). [The topology of collective leadership](#). *The Leadership Quarterly*, 23(6), 994-1011. <https://doi.org/10.1016/j.leaqua.2012.10.010>
- Contractor, N. S., Whitbred, R. C., Fonti, F., & Steglich, C. (2012). [Understanding the ties that bind: A longitudinal investigation of the evolution of a communication network](#). *Western Journal of Communication*, 76(4), 333-357. [doi: 10.1080/10570314.2012.674172](https://doi.org/10.1080/10570314.2012.674172)

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## SOFTWARE DEVELOPMENT

*NU Team Recommender*: Team recommender system for Northwestern University scholars. SONIC Research Group, Northwestern University, 2014-present.

*Technical Support Unit Influence Strategy Wizard*: Recommender system for scaling up health innovations in Bihar, India. SONIC Research Group, Northwestern University, 2014-2017.

*My Dream Team*: Team Recommender System. SONIC Research Group, Northwestern University, 2013-present.

*6DoS: Six Degrees of Separation*: Web based game to understand routing of messages via networks. SONIC Research Group, Northwestern University, 2013-present.

*VIVO Recommender*: Recommending teams for scientific research. SONIC Research Group, Northwestern University, 2012-2017

*Semantic Recommender: Semantic Web Cyberinfrastructure for Inquiring Knowledge Networks on the Web*. SONIC Research Group, Northwestern University, 2011-2017

*C-IKNOW: Cyberinfrastructure for Inquiring Knowledge Networks on the Web People Recommender system*. SONIC Research Group, Northwestern University, 2007-2010.

*IKNOW: Inquiring Knowledge Networks on the Web*. SONIC Research Group at the National Center for Supercomputing Applications at the University of Illinois at Urbana-Champaign, 1997-2007

*Blanche: A computational modeling environment for network evolution*. University of Illinois at Urbana-Champaign, 1997-2007

### **CURRENTLY FUNDED RESEARCH**

National Science Foundation: Natural experiments with online games: Support, impact and mitigation during the Covid-19 Pandemic (2020-2021, \$196,800). Consultant

National Science Foundation: Teaming in the Time of Covid-19: Understanding how technology affordances can enable collaboration during sudden workplace disruption (2020-2021, \$120,000). Principal Investigator

National Aeronautics and Space Administration: *Measuring and Predicting Performance for Individuals Teams and Systems in Interdependent Crew Tasks MAPPITS ICT* (2020-2021, \$30,000). Principal Investigator

National Aeronautics and Space Administration: Prescriptions Optimally Learned Assessing Risk in Space (2020-2021, \$30,000). Principal Investigator

National Institutes of Health: Simulation Modeling to Understand and Address HIV Disparities in Racial Ethnic and Sexual Minority Populations (2020-2023, \$1,614,060). Co-Principal Investigator

National Science Foundation: Collaborative Research: A Hierarchical Multidimensional Network-based Approach for Multi-Competitor Product Design (2020-2023, \$484,538). Co-Principal Investigator

Defense Advanced Research Projects Agency (DARPA) (via Smart Information Flow Technologies): *SCHNEIDER: System for Counterfactual Human Network Evaluation of Individual Differences, Errors, and Residuals*. (2019-2020, \$159,932). Principal Investigator.

Army Research Laboratory: Macro Signatures of Success in Human Autonomy Teams. (2019-2021, \$1,500,000). Principal Investigator.

National Institutes of Health: *SCISIPBIO: Understanding and Assembling Dream Teams to Conduct Clinical and Translational Science*. (2019-2022, \$997,132). Co-Principal Investigator.

National Science Foundation: *Safe Bets and Risky Propositions Leveraging Rich data to Understand Scientific Diversity, Impact, and Potential of Teams*. (2019-2022, \$699,990). Principal Investigator.

Army Research Laboratory: *Wearable Devices for Monitoring Social Networks*. (2019-2021, \$750,000). Co-Investigator.

National Science Foundation: *Workshop on Human Technology Partnerships and the Changing Nature of Work*. (2019-2020, \$50,000). Principal Investigator.

Army Research Laboratory: *The Signatures of Success in Human-Agent Teams*. (2019-2020, \$139,061). Principal Investigator.

Facebook, Inc: *Isolation and Social Media in - and out of- This World*. (2019-2020, \$50,000). Co-Principal Investigator

National Aeronautics and Space Administration (subcontract from University of Georgia): *FUSION: Facilitating Unified Systems of Interdependent Organizational Networks*. (2018-2021, \$308,049). Co-Investigator.

Defense Advanced Research Projects Agency (DARPA) (via Raytheon BBN Technologies): *ACCESS – Agent-based Causal simulator with Cognitive, Environmental, and Social System factors*. (2017-2020, \$302,162). Principal Investigator.

National Institute of General Medical Sciences (subcontract from University of California, Los Angeles): *Team Dynamics, Networks, and Assembly (Team DNA)*. (2016-2021, \$525,247). Co-Investigator.

National Institute on Drug Abuse: *netCanvas: Development, Hardening, and Dissemination of a Software Suite for the Collection of Complex Network and Contextual Data in HIV and Drug Research*. (2016-2021, \$32,023,131). Co-Principal Investigator.

National Aeronautics and Space Administration: *SCALE: Shared Cognitive Architectures for Long-term Exploration*. (2015-2021, NNX15AM26G, \$1,682,829). Co-Principal Investigator.

National Aeronautics and Space Administration: *CREWS: Crew Recommender for Effective Work in Space*. (2015-2020, NNX15AM32G, \$1.05 million). Principal Investigator.

National Aeronautics and Space Administration: *Team Task Switching in Astronaut Crews on the International Space Station: Integrating Multiteam Membership, Multiteam Systems, Multitasking & Multidimensional Networks to Monitor & Enable Functional Work Shifts in Astronaut Crews*. (2015-2020, NNX15AK73G, \$1.05 million). Co-Principal Investigator.



National Institute of Drug Abuse: *Multilevel Influences on HIV and Substance use in a YMSM (young men who sleep with men) Cohort - RADAR*. (2014-2020, 1U01DA036939-01, \$8,697,386). Co-Investigator.

### **PREVIOUSLY FUNDED RESEARCH**

National Aeronautics and Space Administration: *A US-Russian Collaborative Proposal for Data Collection in HERA: The Relationship between Composition, Interpersonal Relations, and Team Effectiveness in Space Crews*. (2016-2019, \$399,989). Co-Principal Investigator.

Army Research Office: *ANN SONIC NICO Workshop on Brain Science and Social Networks*. (2018-2019, \$15,000). Principal Investigator.

Bill & Melinda Gates Foundation: *Novel Approaches to Measuring Demand-side Community Perceptions and Barriers to Family Planning via Social Network Analysis in Kenya* (2015-2018, OPP1135005, \$136,803). Co-Principal Investigator.

National Science Foundation: *CHS: Medium: Collaborative Research: Understanding Online Creative Collaboration over Multidimensional Networks*. (2015-2018, IIS-1514427, \$374,619). Principal Investigator.

Northwestern University Office of the Provost: *Creating Your Dream Team: Using Technology to Form Effective Project Design in STEM (MDT)*. (2017-2018, \$49,988). Principal Investigator.

National Institutes of Health: *Modeling Scientific Workforce Dynamics Using Social Network Analysis*. (2015-2018, U01GM112623-01, \$1.5 million). Co-Principal Investigator.

Army Research Laboratory (subcontract from BBN Technologies): *Integrated Research Center for Network Sciences Collaborative Technology Alliance* (2009-2018, cooperative agreement number W911NF-09-2-0053, \$628,905). Principal Investigator.

National Institutes of Health via UCLA: *Team DNA*. (2016-2017, 1R01GM112938-01, \$122,099.00). Co-Principal Investigator.

National Institutes of Health – National Institute on Drug Abuse (NIDA): *NetCanvas: Development, Hardening, and Dissemination of a Software Suite for the Collection of Complex Network and Contextual Data in HIV and Drug Research* (2016-2017, R01DA042711). Co-Principal Investigator.

Northwestern University Office of the Provost: *Fostering Effective Online Discussion in Higher Education With 'Nebula,' a Graphical Interface for Discussion Boards*. (2016-2017, \$36,980). Co-Principal Investigator.



Army Research Office: *Socio-Cognitive Networks: Theory & Data Driven Approaches for Understanding the Assembly and Interaction Networks of High Performance Teams*. (2014-2017, W911NF-14-1-0686, \$45,187). Principal Investigator.

National Science Foundation: *Multidimensional Network Analysis for Analyzing and Predicting Complex Customer-Product Relations in Engineering Design*. (2014-2017, CMMI-1436658, \$501,444). Co-Principal Investigator.

National Institutes of Health, National Center for Research Resources: *Annual Science of Team Science Conference* (2011-2017, 5R13TR000046-04, \$50,000). Principal Investigator.

DARPA via Virginia Polytechnic Institute and State University: *Montage: Capturing Collective Identity through Multidisciplinary Modeling and Experimentation* (2016-2018, D17AC00003 01, \$43,658). Co-Principal Investigator.

The National Institutes of Health's National Center for Advancing Translational Sciences (2015-2017, TL1TR001423). Member, NUCATS TL1 Executive Leadership Committee.

National Institutes of Health/NHRR: *Northwestern University Clinical and Translational Sciences Institute (NUCATS)* (2008-2016, \$705,711). Subcontract from Feinberg School of Medicine. Investigator.

National Research Foundation of Korea: *Effects of Intrinsic and Extrinsic Motivation on Flow Experience of Social Network Sites for Seniors and the Moderating Role of Anxiety Attachment*. (2015-2016, NRF-2015S1A5A2A03049328, \$57,005,000 Korean Won). Co-Principal Investigator.

National Science Foundation: *SCC-SBE: Research Coordination Network on Leveraging Computational Social Science for Understanding Virtual Organizations* (2012-2015, OCI-1244747, \$484,971). Principal Investigator.

Army Research Institute: *The Coevolution of Multi-Dimensional Dynamic Networks of Multi-Team Systems Related to Organization Effectiveness: Theory Development and Empirical Tests* (2012-2015, W5J9CQ-12-C-007, \$847,050). Co-Principal Investigator.

National Science Foundation: *SoCS: Leveraging Shared Social Interest in a Content Centric Internet* (2012-2015, CNS-1211375, \$750,000). Co- Principal Investigator.

National Science Foundation: *NetSE: Large: Collaborative Research: Contagion in Large Socio-communication Networks* (2010-2015, CNS-1010904, \$474,711) Principal Investigator.

Virginia Polytechnic Institute and National Institute of General Medical Sciences Prime (Eubank): *Synthetic Information Systems for Better Informing Public Health Policymakers* (2011-2015, 2U01GM070694-09, \$16,780). Investigator.

Bill & Melinda Gates Foundation: *Knowledge Networks for Scaling Up Impact* (2013-2014, 21640 & 1084322, \$997,539). Principal Investigator.

National Science Foundation: *EAGER: Collaborative Research: FLASH! Fueling Learning Alliance in Sustainability in Higher Education: Using social media and networks for science* (2012-2014, 1241324, \$141,944). Principal Investigator.

National Science Foundation: *EAGER: Collaborative Research: Some assembly required: Understanding the Emergence of Teams and Ecosystems of Teams* (2012-2014, 1249137, \$123,847). Principal Investigator.

National Science Foundation: *CDI-Type II: Collaborative Research: Groupscope: Instrumenting Research on Interaction Networks in Complex Social Contexts* (2010-2014, BCS-0940851, \$252,518) Principal Investigator.

National Science Foundation: *Collaborative Research: Coupled Models of Diffusion and Individual Behavior over Extremely Large Social Networks* (2009-2014, 0904356, \$267,201) Principal Investigator.

Army Research Laboratory (subcontract from University of Illinois Urbana-Champaign): *Information Network Academic Research Center: An Integrated Approach towards Information Integration, Modeling, Retrieval, and Discovery* (2009-2014, \$650,002) Investigator with Principal Investigator Jiawei Han.

National Science Foundation: *RAPID: Collaborative Research: 3dWomen: Exploring Three Decades of Women's Groups in Sustainable Development and the Impact of Social Media on Women's Professional Networks* (2012-2013, 1240008, \$98,360). Principal Investigator.

National Institute of Health and National Center for Research Resources: *Multidisciplinary Clinical and Translational Science (MCTS) Program (supplement)* (2011-2013, 5UL1RR025741-04S3 Greenland, \$200,000). Principal Investigator.

Air Force Research Laboratory (subaward from University of Southern California): *The Virtual World Observatory: Identifying Real World (RW) Characteristics from Virtual Behavior* (2009-2013, contract FA8650-10-C-7010, \$513,836) Investigator with Principal Investigator Dmitri Williams.

Oncofertility Consortium through the National Institute of Health (2011). *Oncofertility: The Fertility Preservation for Women* (NIH: 5UL1DE019587), Evaluation Committee.

National Science Foundation: Supplement to *Social Networking Tools to Enable Collaboration in the Tobacco Surveillance, Epidemiology, and Evaluation Network (TSEEN)* (2010-2011, IIS-0535214, \$150,000). Principal Investigator.

National Science Foundation: *VOSS: Understanding and Enabling Network Dynamics in Virtual Communities* (2008-2012, IIS-0838564, \$299,269) Co-Principal Investigator, collaborative proposal with Brian Uzzi and Luis Amaral (Northwestern University), and Peter Monge (University of Southern California).

National Science Foundation: *DHB Virtual Worlds: An Exploratorium for Theorizing and Modeling the Dynamics of Group Behavior* (2007-2012, IIS-0841483, \$620,755) Principal Investigator on collaborative proposal with Scott Poole (University of Illinois at Urbana-Champaign), Jaideep Srivastava (University of Minnesota) and Dmitri Williams (University of Southern California).

Global Philanthropy Project: *Understanding and Enabling Networks to Advance the Chicago Climate Action Plan (CCAP)* (2009-2011, \$100,000) Principal Investigator.

The John D. and Catherine T. MacArthur Foundation: *Mapping, Understanding and Enabling the Digital Media Learning (DML) Knowledge Networks: An Exploratory Investigation* (2007-2011, \$140,000) Principal Investigator.

National Science Foundation: *Collaborative Research: Social Networking Tools to Enable Collaboration in the Tobacco Surveillance Epidemiology, and Evaluation Network (TSEEN)* (2007-2010, 0836262, \$575,624) Principal Investigator.

Army Research Institute: *Virtual World Exploratorium* (2008-2010, W91WAW-08-C-0106/P00004, \$923,156) Principal Investigator with Scott Poole (University of Illinois), Jaideep Srivastava (University of Minnesota), and Dmitri Williams (University of Southern California).

National Cancer Institute (subcontract from University of Texas Health Science Center, San Antonio TX): *Analysis, Visualization & Interpretation of the Redes en Accion Cancer Network* (2007-2010, \$166,226) Principal Investigator.

National Science Foundation: *CRI: IAD – A Pressing Need for Observation, Facilitation and Computer Support of Group Interactions for Advancing United States National Priorities – Homeland Security and Economic* (2007-2010, 0709249).

National Science Foundation, ITR: *IT-Based Collaboration Framework for Preparing Against, Responding to, and Recovering from Disasters Involving Critical Physical Infrastructures*, (2004-2010, 0427089, \$2,370,000) Co-Principal Investigator in collaboration with Professors Feniosky Pena-Mora, Gene E. Robinson, and Indranil Gupta (University of Illinois Urbana-Champaign), and Andrea Hollingshead (University of Southern California).

National Cancer Institute: *Population Sciences Grid* (2008-2009, 0836262, \$75,000).

National Science Foundation (subcontract from Purdue University): *Network Recommender System for nanoHUB* (2008-2009, \$50,000).

- National Institute of Health (subcontract from University of Texas San Antonio): *Mapping, Understanding and Enabling the Redes en Accion Latino Cancer Network* (2007-2008, \$56,000) Principal Investigator.
- National Science Foundation: *C-ICNOW Cyberinfrastructure Tools to Enable Knowledge Network Discovery, Diagnosis and Design* (2007-2009, 0753047, \$199,619) Principal Investigator.
- National Science Foundation: *Collaborative Research: DHB Virtual Worlds: An Exploratorium for Theorizing and Modeling the Dynamics of Group Behavior* (2007-2008, 0729505).
- National Science Foundation: *Social Networking Tools to Enable Collaboration in the Tobacco Surveillance, Epidemiology, and Evaluation Network (TSEEN)* (2005-2008, IIS- 0535214, \$808,089). Principal Investigator on collaborative proposal with Katy Börner (Indiana University), Tom Finholt (University of Michigan), and Gary Giovino (Roswell Park Cancer Center, Buffalo, NY).
- National Cancer Institute (supplement from NCI to NSF): *Tobacco Informatics Grid (TobIG): Development of Prototype to Demonstrate Distributed Collaboration and Data Analysis within the Tobacco Research Community* (2006-2007, IIS-0535214, \$400,000) Principal Investigator.
- National Center for Supercomputing Applications: *GroupScope: Instrumenting Research on Interaction of Individuals in Complex Settings* (2006-2007, \$69,347) Principal Investigator on team including Marshall Scott Poole, Feniosky Pena-Mora, Klara Nahrstedt, David Forsyth, and Margaret Fleck.
- National Science Foundation: *Collaborative Research: Mapping and Analyzing Emergent Multiorganizational networks in the Hurricane Katrina Response* (2006-2007, SBE-0555115, \$140,000) Principal Investigator on collaborative proposal with Carter Butts (University of California, Irvine).
- National Science Foundation: *Instrumenting behaviors and attitudes in virtual worlds* (2006-2007, IIS 0628036, \$155,851) Co-Principal Investigator on collaborative proposal with Dmitri Williams (University of Illinois at Urbana-Champaign) and Dan Hunter (University of Pennsylvania).
- National Cancer Institute (subcontract from Battelle Memorial Institute): *Socio-technical Specifications for the Design of a Cyberinfrastructure for a Tobacco Control Informatics Grid* (2005-2006, \$50,000).
- National Science Foundation, Workshop on: *The Role of Social Network Research in Enabling Cyberinfrastructure and the Role of Cyberinfrastructure in Enabling Social Network* held November 3-5, 2005 at the National Center for Supercomputing Applications, University of Illinois at Urbana-Champaign, (2005-2006, SCI-0533892 , \$50,000) Principal Investigator with Co-Principal Investigator Katy Börner (Indiana University).

National Science Foundation: *2006 International Workshop and Conference on Network Science*, held May 2006 at Indiana University, Bloomington, IN. (2005-2007, SES-0532387, \$77,714) Co-Principal Investigator with Laszlo Barabasi (University of Notre Dame), Katy Börner, Alex Vespignani, and Stan Wasserman (Indiana University).

Rockefeller Foundation: *Mapping cultural and network assets in three Chicago communities* (2005, CC 035, \$100,000) Principal Investigator in collaboration with Dr. Alaka Wali (Field Museum, Chicago).

National Science Foundation: *Digital Government: Workshop on US-Hungarian Research Collaborations to Address the Challenges of 21st Century Society*. (2003-2005, 0341928, \$97,702) Principal Investigator on collaborative proposal with Anthony Stefanidis (University of Maine).

National Science Foundation: *SGER: Knowledge Networks and Emerging Heterarchies in Rebuilding New York* (2002-2003, 0233449, \$42,908) Principal Investigator on collaborative proposal with David Stark (Columbia University).

National Aeronautics and Space Administration: *Modeling 21st Century Project Teams: Integrating Workflow and Knowledge Network Models of Organizing* (2002-2003, No. 02-NASA-C-1513, \$100,000) Principal Investigator on collaborative proposal with Ray Levitt (Stanford University).

European Union Information Society & Technology Program (subcontract from LUISS University, Rome): *Developing web-based knowledge asset mapping tools to study the use of communication technologies in organizations* (2002-2003, €7000) Principal Investigator.

Hewlett Packard Mobile Initiative Grant Program: *Using mobile technologies* (2001-2002, \$140,760) Investigator with Principal Investigator Win-Mei W. Hwu.

National Science Foundation: *Co-evolution of Knowledge Networks and 21st Century Organizational Forms: Computational Modeling and Empirical Testing* (1999-2003, 9980109, \$1,500,000) Principal Investigator.

## **KEYNOTE ADDRESSES AND DISTINGUISHED LECTURES**

*Professor Contractor has delivered over 250 keynotes and distinguished lectures. For details see [here](#).*

## **CONFERENCE PRESENTATIONS**

*Professor Contractor has presented over 300 conference papers including over 50 papers over the past 35 years at the annual conferences of the International Communication Association. For details see [here](#).*

## **TEACHING**

*Professor Contractor has taught over 150 undergraduate, graduate, executive/professional and online courses on organizational communication, communication technologies in the workplace, knowledge networks, social network analysis, globalization, and computational social science. He has co-taught over a dozen “virtual” courses with faculty and students at multiple universities using videoconferencing. For details see [here](#).*

## **PROFESSIONAL SERVICE**

### **Editorial Activities**

**Editor** for Communication, Management, and Computational Social Science, *Network Science*, 2012-present.

**Co-Editor**, *IEEE Computer* 2018 special issue on Web Science, 2018.

**Associate Editor**, *Journal of Computer Mediated Communication*, 2013-2017.

**Section Editor** for “New Media and Organizing” in *Handbook of New Media: Social Shaping and Consequences of ICTs* (London: Sage, 2002)

**Editorial Assistant** for *Communication Research*, 1986-1987.

### **Editorial board memberships**

*Computational Communication Research*, 2020- present

*Journal of Communication*, 2001-2003, 2005-2012, 2018- present

*Journal of Computer Mediated Communication*, 2018-present

*Human Communication Research*, 1992-1995, 1997-2004, 2010-2016

*The Review of Communication*, 1999-2012

*Communication Theory*, 1997-1998, 2002-2005, 2010-2012

*Electronic Journal for Computer Mediated Communication*, 1994-2009

*Small Group Research*, 2008-2009

*Journal of Applied Communication Research*, 1996-1997, 2007

*Organization Science*, 2000-2004

*Management Communication Quarterly*, 1992-1998

*Handbook for Small Group Communication*, 1996-1997

### **Ad hoc manuscript reviewer**

*Professor Contractor has served as a reviewer for dozens of interdisciplinary and social science journals, conferences, book proposals and grant proposals. For details see [here](#).*

### **Video Lectures**

National Communication Association (November 18, 2011). Grant seeking Basics: A Guide for the Communication Scholar video, New Orleans, LA. Available online at:  
<https://www.natcom.org/academic-professional-resources/help-grant-seekers>

### **Workshop/Conference Organizer/Program Planner**

Co-organizer, Steering Committee, Networks 2021: A Joint Sunbelt and NetSci Conference, July 6-11, 2021

General Co-chair, 13th ACM Web Science Conference 2021: Globalisation, Inclusion and the Web in the Context of COVID, June 21-25, 2021, Virtual

Co-organizer, 10th International Workshop on Network Theory: The Future of Work, March 12-14, 2020, Evanston, IL.

Co-organizer, 9th International Workshop on Network Theory: Brain Science and Social Networks, October 25-27, 2018, Evanston, IL.

General Co-chair, IEEE/ACM International Conference on Social Networks Analysis and Mining (ASONAM 2018), Barcelona, Spain.

Chair, Workshop on Workforce Development and Intelligence Analysis, designed to gather information for the Decadal Survey of Social and Behavioral Sciences for Applications to National Security, January 24th, 2018, Washington, D.C.

Co-organizer, 8th International Workshop on Network Theory: Wisdom in Networks, March 23-24, 2017, Los Angeles, CA.

Co-chair, National Academies of Science Workshop on Leveraging Advances in Social Network Thinking for National Security, October 11, 2017 Washington, D.C.

Co-organizer, Designing Online Experiments: Citizen Science Approaches to Research Workshop at the 19th Annual Computer-Supported Cooperative Work and Social Computing (CSCW) Conference, February 37, 2016, San Francisco, CA.

Co-organizer, 7th International Workshop on Network Theory: Peer Production Networks, October 29-31, 2015, Evanston, IL.



Co-organizer, Doctoral Consortium Planning Committee, INGRoup Annual Conference, July 22, 2015, Pittsburgh, PA.

Member, Planning Committee, 1st Computational Social Science Summit, May 15-17, 2015, Evanston, IL.

Co-chair, Computational Approaches to Advance Communication Research Preconference Workshop at the Annual Conference of the International Communication Association, May 21, 2015, San Juan, Puerto Rico.

Member, Steering Committee, 5th International Science of Team Science Conference, August 6-9, 2014, Austin, TX.

Co-organizer, 6th International Workshop on Network Theory: Social Networks in Governmental and Nongovernmental Sectors, April 10-12, 2014, Los Angeles, CA.

Member, Doctoral Consortium Planning Committee, Communication & Technology Division, International Communication Association 2011-2014.

Co-organizer, 5th International Workshop on Network Theory: Network Science meets the Science of Teams, October 3-5, 2013, Evanston, IL.

Conference Co-Chair, 4th International Science of Team Science Conference, June 24-27, 2013, Evanston, IL.

Co-organizer, Satellite workshop to the UN Framework Convention on Climate Change Conference on "Climate Change and Sustainability Communication - New Tools and Trends" at Northwestern University Qatar, December 1, 2012, Doha, Qatar.

Conference Co-Chair, Network Science, NetSci 2012, June 18-22, 2012, Evanston, IL.

Conference Co-Chair, ACM Web Science, WebSci 2012, June 22-24, 2012, Evanston, IL.

Co-organizer, 4th International Workshop on Network Theory: Networked Social Movements and Network Theory, April 26-28, 2012, Los Angeles, CA.

Co-chair, Professional development workshop *The innovations in team innovation: The science of teams and the science in teams* at the Annual Meeting of the Academy of Management August 3, 2012, Boston, MA.

Co-chair (with Brian Uzzi), Net Sci 2012 and ACM Web Science 2012, Evanston, IL.

Associate Chair, February 11-15, 2012, The 2012 ACM Conference on Computer Supported Cooperative Work (CSCW 2012), Seattle, W.A.

Co-organizer, 3rd International Workshop on Network Theory: Network Science meets Web Science, March 4-6, 2011, Evanston, IL.

Member, 2011 National Communication Association Organizational Communication Division Awards Committee.

Co-organizer, 2011 Social Mobile Web workshop at ICWSM, Barcelona.

Co-organizer (with Brian Uzzi) 2011 NICO (Northwestern Institute on Complex Systems) Complexity Conference, Evanston, IL.

General co-chair, 2011 3rd International Conference on Social Informatics, Singapore.

Member, Review and Selection Committee, May 6, 2011, Second Doctoral Consortium of the Communication and Technology Division of the International Communication Association, Boston, MA.

Co-chair (with Les Carr), Program Track, WWW 2010 Extended Semantic Web Conference, Raleigh, NC.

Co-chair (with Holly Falk-Krzesinski), 1st Annual International Conference on the Science of Team Science, April 22-24, 2010, Chicago, IL.

Co-organizer, 2nd International Seminar on Network Theory: Network Multidimensionality in the Digital Age, February 19-20, 2010, Los Angeles, CA.

Member, Program Committee, 2009, 2010, WWW Conference

Member, Organizing Committee, 2010 Extended Semantic Web Conference

Faculty co-organizer (with Paul Leonardi) October 16-18, 2009, 22nd annual Organizational Communication Mini-Conference, Northwestern University, Evanston, IL.

Co-chair (with Karen Church, Josep M. Pujol, & Barry Smyth) August 29-31, 2009, Social Mobile Web workshop, Vancouver, Canada.

Co-organizer (with Uri Wilensky and Seyed Iravani) 2009 NICO Annual Conference on Complexity and Networks, Evanston, IL.

Co-organizer (with David Lazer & Ines Mergel, Kennedy School of Government, Harvard University), 2008, Workshop on Application of Social Network Analysis in Digital Government. NSF Digital Government Conference, Montreal, Canada.

- Co-organizer (with Charles Steinfield, Brian Pentland, and Mark Ackerman) of the 3rd International Communities & Technologies conference, 2007, Michigan State University, East Lansing, MI.
- Co-organizer, 1st International Seminar on Network Theory: Interdisciplinary Approaches to Social Network Theory, September 15-16, 2006, Los Angeles, CA.
- Co-organizer (with Katy Borner, Stan Wasserman, Laszlo Barabasi, & Alessandro Vespignani) May 2006, International workshop and conference on Network Science (NetSci 2006), Bloomington, IN.
- Co-organizer (with Brad Hesse, National Cancer Institute), May 2006, Symposium on Cyberinfrastructure for Public Health, 2006 NSF Digital Government Conference, San Diego, CA.
- Co-organizer (with David Lazer & Ines Mergel, Kennedy School of Government, Harvard University), May 2006, 2007, Workshop on Application of Social Network Analysis in Digital Government. NSF Digital Government Conference, San Diego, CA.
- Co-organizer (with Katy Borner), October 2006, NSF Workshop on Social Networks and Cyberinfrastructure (SNAC). National Center for Supercomputing Applications, Urbana, IL.
- Co-organizer (with David Lazer & Ines Mergel, Kennedy School of Government, Harvard University), 2005, Workshop on Application of Social Network Analysis in Digital Government. NSF Digital Government meeting, Atlanta, GA.
- Co-organizer (with Scott Leischow, National Cancer Institute), May 16, 2005, Symposium and "Birds of a Feather" Session on Cyberinfrastructure for Public Health. NSF Digital Government Meeting, Atlanta, GA.
- Member, Program Committee, August 22-26, 2005, eGov 2005 Conference, Copenhagen, Denmark.
- Member, Program Committee, August 30-September 3, 2004, eGov 2004 Conference, Zaragosa, Spain.
- Member, Organizing Committee, 2003-2007, International Symposium on Understanding Complex Systems, Urbana-Champaign, IL. <http://www.how-why.com/ucs2005/>
- Co-organizer (with Steve Corman & Ron Rice), May 27, 2004, Workshop on Communication Networks in the Public Interest. Annual Conference of the International Communication Association, New Orleans, LA.

Co-organizer, (with Anthony Stefanidis, U of Maine) May 24, 2004, Birds of a Feather. Session on International Collaboration on Digital Government Research, Digital Government 2004 meeting, Seattle, WA. <http://www.dgrc.org/dgo2004/program/bofs/nosh.pdf>

Co-organizer, (with Anthony Stefanidis, U of Maine) May 21-24, 2004, NSF Workshop on Information Society Technologies and Research Challenges for the 21st Century, Budapest, Hungary.

Organizer and Moderator, February 25, 2004, Gizmos, Gadgets and Googles, Panel sponsored by UIUC's Illinois Program for Research in the Humanities, Urbana, IL.

Organizer and Moderator, December 9, 2003, Silicon, Carbon, Culture Roundtable: Discussion on the projects undertaken as part of the 3-semester initiative, jointly sponsored by UIUC College of LAS and FAA, Beckman Auditorium, Urbana, IL.

Program Planner, May 2003, Organizational Communication Division, Annual Conference of the International Communication Association, San Diego, CA.

Member, Program Committee, 2003, Digital Cities 3: Local Information And Communication Infrastructures: Experiences And Challenges, Kyoto, Japan.

Program Planner, July 15-19, 2002, Organizational Communication Division, Annual Conference of the International Communication Association, Seoul, South Korea.

Member, Program Committee, 2002, International Workshop on Regulated Agent-Based Social Systems: Theories and Applications (RASTA'02).

Member, Program Committee, February 12-17, 2002, International Network for Social Network Analysis Annual Sunbelt Conference, New Orleans, LA.

Member, Program Committee, October 18-21, 2001, 3rd Kyoto Digital Cities and Communityware Meeting, Kyoto, Japan.

Member, Workshop on Collaborative Learning, May 18-21, 1998, UIUC Summer Faculty Institute, Urbana, IL.

Member, Program Committee, 1998, ICA Annual Convention, soliciting sponsorship, providing Internet/Web support, Jerusalem, Israel.

Member, Program Committee, 1997, ICA Annual Convention, soliciting sponsorship, providing Internet/Web support, Montreal, Canada.

Faculty Coordinator, 1997, IXth Annual Organizational Communication Miniconference, Champaign-Urbana, IL.

Member, 1996-1997, SCA Nominations Committee, Publications Awards in Organizational Communication.

### **Membership in Professional Associations**

American Association for the Advancement of Science (AAAS)  
Academy of Management (AOM)  
American Sociological Association (ASA)  
Association for Computing Machinery (ACM)  
Institute for Operations Research and Management Science (INFORMS)  
International Communication Association (ICA)  
International Network for Social Network Analysis (INSNA)  
Interdisciplinary Network for Group Research (INGROUP)  
National Communication Association (NCA)  
Network Science Society (NetSci)

### **Advisory Board Appointments (Only current)**

Member, Advisory Board, Journal of Quantitative Description: Digital Media, 2020

Member, External Advisory, Indiana University Network Science Institute, 2014-present.

Member, Board of Trustees, Web Science Trust, 2011-present

Member, External Advisory Committee, European Union FP7 Network of Excellence in Internet Science –EINS (<http://www.internet-science.eu/>), 2014- present

Member, External Advisory Board, USC Media Impact Project, 2014-present

Member, Advisory Board, Journal of Human Computation, 2014-present

Member, Advisory Board, Journal of Web Science, 2014-present

Member, Jury for the Everett Rogers Award - for achievement in the fields pioneered by scholar and teacher Everett M. Rogers. ([www.rogersaward.org](http://www.rogersaward.org)), 2014 - present

Member, External Advisory, ACTNext initiative at ACT, 2016-2020.

### **Professional Association Committee Appointments & Elected Offices**

President-Elect, International Communication Association (ICA), 2020/2021

Member, Society of Behavioral Medicine Presidential Working Group (PWG) on Climate Change, Behavior Change, and Health, 2020-2021

Member, Selection Committee, OCD Monographs & Edited Book Award, National Communication Association (NCA), 2019

Member, Board of Directors, Society of Scholars of Zoroastrianism, 2019-present.

Member, Fellows Working Group on Diversity, International Communication Association (ICA), 2019-present.

Member, Selection Committee, Best Paper Award, Computational Methods Interest Group, International Communication Association (ICA), 2018.

Member, Decadal Survey of Social and Behavioral Sciences and Applications to National Security Committee, 2017-2019.

Member, Ad Hoc Best Paper committee, ICA Computational Methods Interest group, 2018.

Member, New National Communication Association (NCA) Center on Communication Excellence (Center Taskforce), 2016-2018.

Member, Board of Directors, International Network for Social Network Analysis (INSNA), 2013-2016.

Member, Board of Directors, NetSci Society, 2012-2015.

Member, Nominations Committee, Organizational Communication Division, International Communication Association, 2011.

Chair, International Communication Association (ICA) Liaison Committee, 2010-2012

Member, International Communication Association (ICA) External Research Funding Task Force, 2009

Member, International Communication Association (ICA) Development Task Force, 2008-2009

Program Director, Web Science Research Initiative, 2009

Chair, Freeman Awards Committee, International Network for Social Network Analysis, 2007-2008

Chair, International Communication Association, Development Task Force, 2007

Chair, International Communication Association, Nominating committee, 2004-2005

Member, Joint ICA-NCA Task Force, Organizational Assessment Tools, 2003-2005



Member, Best Publication Award Committee, Organizational Communication & Information Systems Division, Academy of Management, 2004-2005

Member, International Communication Association Nominating Committee, 2003-2004

Member, International Communication Association Theme Committee, 2003-2004

Chair, Web Services, International Communication Association, 2000-2001

Member, National Communication Association (NCA) National Science Foundation (NSF) Task Force, 2000-2003

Chair, International Communication Association, Organizational Communication Division, Redding Dissertation Award Committee, 1998

Chair, Organizational Communication Division, International Communication Association, 2002-2004

Vice-Chair, Organizational Communication Division, International Communication Association, 1999- 2001

Secretary, Organizational Communication Division, International Communication Association, 1997-1999

### **External University Appointments**

Honored Professor, School of Business, Fudan University, Shanghai, China, 2010-present.

Distinguished Visiting Scholar, Center for Work, Technology, & Organizations (WTO) in the Department of Management Science & Engineering at Stanford University's School of Engineering, CA, Winter quarter 2017.

External Member, Web Science Distinguished Faculty Search Committee, University of Southampton, UK, 2014.

Member, External Review Committee, College of Communication, Boston University, 2014.

Member, External Review Panel, Department of Communication, Cornell University, 2011.

Member, External Advisory Committee to review Social Informatics Program, School of Informatics and Computing at Indiana University, Bloomington, IN, 2010.

Fellow, The Field Museum, Chicago, Division of Environment, Culture, and Conservation (ECCo), 2007-2015.

External Faculty, Center for Organizational Innovation, Columbia University, 2002-2007.

Faculty Advisory Board, Program in Business Communication, Jones International University, Englewood, CO, 1996-2001.

Van Zelst Distinguished Scholar in Residence, Northwestern University, May 1-5, 2006.

Visiting Scholar, Department of Communication, Purdue University, April 3-7, 2006.

Visiting Honorary Professor, University of Science and Technology of China. Hefei, China, November 2004.

Annenberg Scholar, Annenberg School of Communication, University of Pennsylvania, fall, 1997.

Invited Faculty, Executive M.B.A. Program, University of Jyväskylä, Finland, 1995.

### **SELECTED UNIVERSITY SERVICE**

#### **Northwestern University (Only current)**

Member, Communication Studies, Graduate Curriculum Committee, 2020-2021

Member, Northwestern IRB Panel E to review Social Behavioral Research, 2020

Member, Media, Technology, and Society PhD Admissions Committee, 2020-2021

Member, Program Committee, Master's of Science in Communication, 2020-2021

Member, Personnel Committee, Kellogg School of Management, 2019-2020

Client Project Challenge Adviser, Department of Industrial Engineering & Management Sciences, 2019-2020

Faculty Associate, Institute for Policy Research, 2019-present

Member, Faculty Advisory Board, Master of Science in Communication Program, Northwestern University, 2019-present

Member, Faculty Search Committee, Communication Studies, Northwestern, 2019-present

Member, McCormick School of Engineering Tenure & Promotion committee, 2019-present

Member, Northwestern University Graduate Program Review Committee, 2019-present

Mentor for Junior Faculty, Searle Fellows Program, 2019-present

Member, Doctoral Admissions Committee in Management & Organizations (MORS), 2018-present

Member, Doctoral Admissions Committee in Industrial, Engineering, and Management Sciences (IEMS), 2018-present

Member, Promotion & Tenure Committee, Kellogg School of Management, 2018-present

Member, Design Research Cluster, Segal Design Institute, Northwestern Engineering, and The Graduate School, 2018-present

Member, Advisory Board, Northwestern Institute on Complex Systems (NICO), 2018-present

Member, Faculty Senate Research Affairs Committee, 2016-present

Member, Faculty Senate, 2014-present

Core Faculty, Northwestern Institute on Complex Systems (NICO), 2007-present

## **PUBLIC SERVICE**

### **Consulting Activities**

*Professor Contractor has consulted with over 30 for-profit, non-profit and government organizations. For details see [here](#).*

### **Selected Publications for Media and Popular Press**

*Professor Contractor's research has received media coverage in over 60 national and international venues including print, radio, TV and social media. For details see [here](#).*