

Marlon D. Twyman II

University of Southern California

3502 Watt Way, Los Angeles CA 90089

MarlonTw@usc.edu / 213-740-9689 / <https://www.marlontwyman.com>

EDUCATION

PhD, Technology and Social Behavior

September 6, 2019

Northwestern University, Evanston, IL

Departments of Communication Studies, and Electrical Engineering & Computer Science

Dissertation: Relational Mechanisms in Team Self-Assembly: A Network and Computational Approach

Advisor: Noshir Contractor

Committee: Dan Newman (external member), Ned Smith, and Uri Wilensky

MS, Biomedical Engineering

March 2012

BS, Biomedical Engineering (University Honors Scholar, Cum Laude)

June 2010

Wright State University, Dayton OH

ACADEMIC EMPLOYMENT

Assistant Professor of Communication

July 2019—Present

University of Southern California, Los Angeles, CA

Annenberg School for Communication & Journalism

Additional Role: Co-Director, Annenberg Networks Network Research Group

Distinguished Fellow

2022—2023

University of Pennsylvania, Philadelphia, PA

Annenberg Center for Collaborative Communication

Visiting Scholar

October 2021

Stanford University, Stanford, CA

Stanford Graduate School of Business, Organizational Behavior—Macro

PEER-REVIEWED JOURNAL ARTICLES

*Note: * indicates student co-author and senior author is underlined.*

1. Zhen, L.* & Twyman, M. (2024). Do Inclusive Incentive Systems Encourage Prosocial or Competitive Behavior in Online Communities? *New Media & Society*.
<https://doi.org/10.1177/14614448241243099>
2. Twyman, M., Murić, G., & Zheng, W.* (2023). Positioning in a Collaboration Network and Performance in Competitions: A Case Study of Kaggle. *Journal of Computer-Mediated*

Communication: Special Issue on Technology and the Future of Work.

<https://doi.org/10.1093/jcmc/zmad024>

3. **Twyman, M.**, Newman, D. A., DeChurch, L., & Contractor, N. (2022). Teammate invitation networks: The roles of recommender systems and prior collaboration in team assembly. *Social Networks*, 68, 84–96. <https://doi.org/10.1016/j.socnet.2021.04.008>
4. Young, L. E., Sidnam-Mauch, E., **Twyman, M.**, Wang, L., Xu, J. J., Sargent, M., Valente, T., Ferrara, E., Fulk, J., & Monge, P. (2021). Disrupting the COVID-19 Misinfodemic With Network Interventions: Network Solutions for Network Problems. *American Journal of Public Health*, e1–e6. <https://doi.org/10.2105/AJPH.2020.306063>
5. Eyink, K., Grazulis, L., Mahalingam, K., Shoaf, J., Hart, V., Esposito, D., Hoelscher, J., **Twyman, M.**, Tomich, D. (2012). Nanofabricated quantum dot array formation through annealing of nano-patterned planar InAs. *Journal of Vacuum Science and Technology. Materials, Processing, Measurement, & Phenomena: JVST B.*,30(4), 041806. <https://doi.org/10.1116/1.4731471>
6. Eyink, K., Grazulis, L., **Twyman, M.**, & Mahalingam, K. (2010). Study of the driving force for the self-assembly of heterojunction quantum dots (zero D molecules) using finite element analysis. *Journal of Vacuum Science and Technology. Materials, Processing, Measurement, & Phenomena: JVST B.*,28(3), C3C33-C3C36. <https://doi.org/10.1116/1.3273902>

PEER-REVIEWED CONFERENCE PROCEEDINGS

7. **Twyman, M.** & Majchzrak, A. (2024). Introducing Women to Data Science: Investigating the Gender Gap in a Learning Initiative on Kaggle. To appear in Bui, T.X. & Sprague, R.H. (Eds.), *Proceedings of the 57th Hawaii International Conference on System Sciences.* <https://hdl.handle.net/10125/107247>
8. Gómez-Zarà, D., Paras, M., **Twyman, M.**, Lane, J.N., DeChurch, L.A., & Contractor, N.S. (2019). Who Would You Like to Work With?: Use of Individual Characteristics and Social Networks in Team Formation Systems. In *CHI Conference on Human Factors in Computing Systems (CHI 2019), May 4-9, 2019, Glasgow, Scotland, UK.* ACM, New York, NY, USA, 15 pages. <https://doi.org/10.1145/3290605.3300889> [acceptance rate: 24%]
9. **Twyman, M.**, Keegan, B. C., & Shaw, A. (2017). Black Lives Matter in Wikipedia: Collective Memory and Collaboration Around Online Social Movements. In *Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing* (pp.

1400–1412). New York, NY, USA: ACM. <https://doi.org/10.1145/2998181.2998232>

[acceptance rate: 35%]

10. **Twyman, M.**, Mullenbach, J., Shultz, C., Colgate, J. E., & Piper, A. M. (2015). Designing Wearable Haptic Information Displays for People with Vision Impairments. In *TEI '15: Proceedings of the Ninth International Conference on Tangible, Embedded, and Embodied Interaction* (pp. 341–344). New York, NY, USA: ACM. <https://doi.org/10.1145/2677199.2680578> [acceptance rate: 28%]
11. Mahalingam, K., Eyink, K., **Twyman, M.**, Shoaf, J., & Grazulis, L. (2010). Strain Relaxation in Planar InAs Epitaxial Layers Studied by High-Resolution Transmission Electron Microscopy. *Microscopy and Microanalysis*, 16(S2), 1786-1787. <https://doi.org/10.1017/S1431927610059702>
12. Eyink, K., Grazulis, L., Mahalingam, K., **Twyman, M.**, Shoaf, J., Hoelscher, J., Claffin, C., Tomich, D. (2010). Shape changes in patterned planar InAs as a function of thickness and temperature. *Quantum Dots and Nanostructures: Synthesis, Characterization, and Modeling VII*, 7610, 57–64. <https://doi.org/10.1117/12.845939>

Book Chapters

13. **Twyman, M.** & Contractor, N. (2019). Team Assembly. In: Hall K., Vogel A., Croyle R. (eds) *Strategies for Team Science Success*. Springer, Cham. https://doi.org/10.1007/978-3-030-20992-6_17

Articles Under Review

14. Atwell, J. & **Twyman, M.** (Revise & Resubmit). Metawisdom of the Crowd: How Choice Within Aided Decision Making Can Make Crowd Wisdom Robust. *Management Science*. Early Draft Version on arxiv: <https://arxiv.org/abs/2308.15451>
Note: Equal authorship; authors listed in alphabetical order by last name.
15. **Twyman, M.** (Reject & Resubmit). Attracting Attention Online: Signaling Topic Diversity and Status in a User-Generated Content Community *Information Systems Research*

Grant Funding

External Funding

- **National Science Foundation (NSF) Computer and Information Science and Engineering (CISE) Research Initiation Initiative (CRII)** Principal Investigator, “CRII: HCC: The Creation, Maintenance, and Disruption of Inequality in Online Communities,” **Award IIS-2104551: \$174,950, (June 1, 2021—May 31, 2024)**

Internal Funding

- **USC Annenberg School for Communication and Journalism Dean’s Faculty Research Fund** Co-Principal Investigator (PI: Lindsay Young, Co-PI: Aimei Yang), “Effects of Message Framing and Information Diversity on Susceptibility to Climate Change,” Amount: \$9,840

Invited Seminars, Presentations, and Talks

External

2024

- **UNIVERSITY OF CALIFORNIA, LOS ANGELES** (Los Angeles, CA): *Department of Communication, Communication & Politics Group*

2023

- **UNIVERSITY OF WISCONSIN** (Madison, WI): *School of Journalism and Mass Communication, Emerging Scholars Speaker Program*
- **RUTGERS UNIVERSITY** (New Brunswick, NJ): *School of Communication and Information, NetSci (Network Science) Research Seminar*
- **UNIVERSITY OF PENNSYLVANIA** (Philadelphia, PA): *Annenberg School for Communication, Center for Information Networks and Democracy – Career Retrospective and Trajectory*
- **UNIVERSITY OF WISCONSIN** (Madison, WI): *School of Journalism and Mass Communication, Computational Methods Research Group*

2022

- **MICROSOFT RESEARCH** (Virtual): *Race, Caste, Indigeneity, Tech, and Work Workshop*

2021

- **MASSACHUSETTS INSTITUTE OF TECHNOLOGY** (Cambridge, MA): *Sloan School of Management, Work and Organization Studies – Economic Sociology*
- **STANFORD UNIVERSITY** (Stanford, CA): *Graduate School of Business, Organizational Behavior—Macro Group*

2019

- **SYRACUSE UNIVERSITY** (Syracuse, NY): *School of Information Studies, Digital Knowledge Management Seminar*
- **UNIVERSITY OF NOTRE DAME** (South Bend, IN): *Mendoza College of Business, Information Technology, Analytics, and Operations Seminar*

2018

- **UNIVERSITY OF SOUTHERN CALIFORNIA** (Los Angeles, CA): *Annenberg School for Communication and Journalism, Department of Communication Seminar*
- **UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN** (Champaign, IL): *School of Labor and Employment Relations, Department Seminar*

Internal

UNIVERSITY OF SOUTHERN CALIFORNIA (Los Angeles, CA)

2023

- *Dornsife College of Letters, Arts and Sciences, Department of Physics and Astronomy, Workshop on Artificial Intelligence for Discovery in the Sciences*

2022

- *Annenberg School for Communication and Journalism, Department of Communication, Center for Public Diplomacy*
- *Annenberg School for Communication and Journalism, Department of Communication, Annenberg Research Network on International Communication*

2019

- *Keck School of Medicine, Department of Population and Public Health Sciences, Center for Applied Network Analysis*

NORTHWESTERN UNIVERSITY (Evanston, IL)

2019

- *School of Education and Social Policy, Center for Connected Learning and Computer-Based Modeling*

AWARDS, FELLOWSHIPS, AND SCHOLARSHIPS

- **Fulbright Specialist Roster (2023-2026)**, *U.S. Department of State's Bureau of Educational and Cultural Affairs (ECA) and World Learning*
- **USC Provost Assistant Professor Fellowship (2019—Present)**, *University of Southern California Office of the Provost, Los Angeles, CA*
- **Donald H. and Carolyn E. Ecroyd Fellowship (2017—2018)**, *Northwestern University School of Communication, Evanston, IL*
- **Best Student Paper—Runner-up (2016)**, *Interdisciplinary Network for Group Research Conference, Helsinki, Finland*

- **Google, Inc. Travel Grant (2014)**, *National Society of Black Engineers (NSBE) Professional Development Conference, Phoenix, AZ*
- **GEM Fellowship (2013; 5 Years of PhD Funding)**, *The National GEM Consortium, Alexandria, VA*
- **Air Force Research Lab/DAGSI Research Fellowship (2010; 2 Years of MS Funding)**, *Dayton Area Graduate Studies Institute, Dayton, OH*
- **NASA Senior Scholarship (2009-2010)**, *NASA Ohio Space Grant Consortium*
- **Choose Ohio First Scholarship (2008)**, *University System of Ohio*
- **Wright STEPP Full-Tuition Scholarship (2007-2010)**, *Wright State University*
- **NSF Glenn Stokes Research Internship (2007)**, *NSF Ohio Science and Engineering Alliance*
- **Competitive Honors Scholarship (2006-2010)**, *Honors College, Wright State University*
- **C.J. McLin Student Leadership Development Scholarship (2006-2010)**, *Honors College, Wright State University*
- **Horizons in Medicine Full-Tuition Scholarship (2006)**, *Wright State University*

Teaching Experience

UNIVERSITY OF SOUTHERN CALIFORNIA (Instructor of Record, Course Designer)

- **Communication Networks** (2020, 2021), *PhD Seminar*
- **Organizational Communication** (2020, 2021, 2022), *Undergraduate Lecture*
- **Understanding Social Science Research** (2021, 2022), *Large Undergraduate Lecture, Core, Required*
- **Inclusion & Equity in Social Networks** (2022), *Session for Microsoft Global Communications Course*
- **Undergraduate Honors Thesis Supervisor** (2023), *Independent research project*
- **Undergraduate Directed Research Supervisor** (2023), *Independent research project*
- **Annenberg Summer Institute in Methods & Statistics (ASIMS) Social Networks Workshop** (2020), *One-week intensive PhD student workshop*

NORTHWESTERN UNIVERSITY (Teaching Assistant)

Kellogg School of Management, McCormick Engineering, School of Communication

- **Design of Networks** with Noshir Contractor (2015, 2016), *MBA/M.S. Lecture in Design Innovation*
- **Social Network Analysis** with Noshir Contractor (2016), *Undergraduate Lecture*
- **Networks and Innovation** with Noshir Contractor and Paul Leonardi (2016, 2017), *Kellogg School of Management Executive Education: Leading into the Future: Managing in a Changing World*
- **Social Network Analysis** with Noshir Contractor (2018), *PhD Seminar*

CONFERENCE PAPERS, POSTERS, AND ABSTRACTS

Note: * indicates student co-author and senior author is underlined.

2024

1. Kim, H. K.* , Nayak, S.* , Roknaldin, A.* , Zhang, X.* , Twyman, M., & Lu, S. (2024, February 26). Exploring the Impact of ChatGPT on Student Interactions in Computer-Supported Collaborative Learning. Poster presented at the *AAAI2024 Workshop on AI for Education (AI4ED) - Bridging Innovation and Responsibility*, Vancouver, BC, Canada, February 26-27, 2024. <http://arxiv.org/abs/2403.07082>

2023

2. Atwell, J. & Twyman, M. (2023, November). Metawisdom of the Crowd: How Choice Within Aided Decision Making Can Make Crowd Wisdom Robust. Paper presented at the *Society for Judgment and Decision Making Annual Conference 2023*, San Francisco, CA, November 17-20, 2023.
3. Atwell, J. & Twyman, M. (2023, October). Metawisdom of the Crowd: How Choice Within Aided Decision Making Can Make Crowd Wisdom Robust. Paper presented at the *2023 INFORMS Annual Meeting*, Phoenix, AZ, October 15-18, 2023.
4. Twyman, M., Zaggl, M. Yang, Y.* , Mutha, N.* , & Majchrzak, A. (2023, August). The Data Science Gender Gap: Investigating Progression Rates in the Kaggle Online Community. Paper presented at the *83rd Annual Meeting of the Academy of Management*, Boston, MA, August 4-8, 2023. *Academy of Management Proceedings*, 2023(1), 16996. <https://doi.org/10.5465/AMPROC.2023.16996abstract>
5. Twyman, M. (2023, August). Participant in P. Solanelles & K. Cullen-Lester (Organizers), "Teaming Up! Maximizing Employees' Potential through the Assembly of Teams" Caucus at the *83rd Annual Meeting of the Academy of Management*, Boston, MA, August 4-8, 2023.
6. Twyman, M. (2023, June). Cultural and Historical Context of Social Issues in Wikipedia. Paper presented at *wikihistories 2023: Wikipedia and its implications for memory (and forgetting) Conference*, Virtual, June 8, 2023. Abstract retrieved from <https://wikihistories.net/2023/04/12/marlon-twyman-cultural-and-historical-context-of-social-issues-in-wikipedia/>
7. Zhen, L.* & Twyman, M. (2023, May). Do Inclusive Incentive Systems Encourage Prosocial or Competitive Behavior in Online Communities? Paper presented at the *73rd Annual International Communication Association Conference (ICA 2023)*, Toronto, Ontario, Canada, May 25-29, 2023.

2022

8. Lee, E.* & Twyman, M. (2022, November). Which Competitive Signals Matter? The Effects of Manager Status, Maturity, and Experience Diversity on Organizational Performance. Paper presented at the *National Communication Association 108th Annual Convention (NCA 2022)*, New Orleans, LA, November 16-20, 2022.
9. Atwell, J. & Twyman, M. (2022, October). Information Choice and the Wisdom of the Crowd. Paper presented at the *ACM Collective Intelligence Conference 2022*, Virtual Conference, October 20-21, 2022. Abstract retrieved from <https://custom.cvent.com/805440B54D1D4794AD337EF0B9CB88E5/files/02035ec556f54f60b7704c9b4dca55fe.pdf>
10. Twyman, M. (2022, August). Session Presider for N. Lee (Session Organizer), "Does Technology Bring Value to Social Communications, or Does it Deepen Distrust?" Session at the *117th Annual Meeting of the American Sociological Association*, Los Angeles, CA, August 5-9, 2022.
11. Atwell, J. & Twyman, M. (2022, April). Information Choice and the Wisdom of the Crowd. Paper presented at the *2022 Decentralization Conference – The Scope of Mechanism Design*:

Bespoke Mechanisms to General Frameworks, Bocconi University (Milan, Italy), Columbia University (New York, NY, USA), University of Michigan (Ann Arbor, MI, USA), and Stanford University/CASBS (Palo Alto, CA, USA), April 23-24, 2022.

2021

12. Carnevale, P. & **Twyman, M.** (2021, July). Network Motifs in Market Negotiation. In E. Hart (Chair), "Who negotiates and when? Individual- and group-level differences in negotiation behavior and outcomes." Symposium conducted at the 34th Annual Meeting of the International Association for Conflict Management, Virtual Conference. July 12-14, 2021. Abstract retrieved from https://iafcm.org/2021/modules/request.php?module=oc_program&action=summary.php&id=19
13. Carnevale, P. & **Twyman, M.** (2021, July). Reference Shift in the Market Ultimatum. Paper presented at the 34th Annual Meeting of the International Association for Conflict Management, Virtual Conference, July 12-14, 2021. Abstract retrieved from https://iafcm.org/2021/modules/request.php?module=oc_program&action=summary.php&id=154
14. **Twyman, M.** (2021, May). Tagging for Attention: Categorization and Status Production in an Online Community. Paper presented at the 71st Annual International Communication Association Conference (ICA 2021), Virtual Conference, May 27-31, 2021.

2020

15. Bass, E., Maric, S., Milosevic, I., Uhl-Bien, M., Groves, K. S., Kim, D., Lord, J., Silvera, G., Clark, J., Feyerherm, A. E., Hollingsworth, J., Owen-Smith, J., **Twyman, M.**, & Vogus, T. J. (2020, August). "Future of Leadership in Healthcare: Enabling Complexity Dynamics Across Levels" Symposium. *Academy of Management Proceedings*, 2020(1), 13598: <https://doi.org/10.5465/AMBPP.2020.13598symposium>
16. Sun, J.* & **Twyman, M.** (2020, May). The Social Dynamics of Hierarchical Knowledge Categorization: A Study of Kaggle Competitions. Extended Abstract presented at the 70th Annual International Communication Association Conference (ICA 2020), Virtual Conference, May 20-26, 2020.

2018

17. Gómez-Zarà, D., Ng, J., **Twyman, M.**, DeChurch, L., Andreoli, S., Contractor, N. (2018, July). Social Cognition and Team Assembly: Competence, Warmth, or Embeddedness. Paper presented at the *Interdisciplinary Network for Group Research Conference*, Bethesda, MA, July 18-21, 2018.
18. **Twyman, M.**, Mesmer-Magnus, J., Lungeanu, A., DeChurch, L. A., & Contractor, N. S. (2018, July). The Emergence and Development of Crew Shared Mental Models: An Agent-Based Model. Paper presented at the *Interdisciplinary Network for Group Research Conference*, Bethesda, MA, July 18-21, 2018.
19. **Twyman, M.**, Mesmer-Magnus, J., Lungeanu, A., DeChurch, L. A., & Contractor, N. S. (2018, July). The Emergence and Development of Crew Shared Mental Models: An Agent-Based Model. Paper presented at *2018 International Conference on Computational Social Science (IC2S2)*. Evanston, Illinois, July 12-15, 2018.
20. Tanaka, K., Jha, S., Gado, H., **Twyman, M.**, DeChurch, L. A., & Contractor, N. S. (2018, June). 6-DoS (Six Degrees of Separation): A Web-Based Platform to Conduct Small-World Experiments. Paper presented at the *XXXVIII Sunbelt Conference of the International Network for Social Network Analysis (INSNA)*, Utrecht, Netherlands, June 26-July 1, 2018.
21. **Twyman, M.**, Newman, D., DeChurch, L.A., & Contractor, N.S. (2018, April). Inviting Your Next Teammate: Algorithms & Acquaintances. Poster presented at the *Society for Industrial and Organizational Psychology (SIOP) Annual Conference*, Chicago, IL, April 19-21, 2018.
22. Gómez-Zarà, D., Ng, J., **Twyman, M.**, DeChurch, L., Contractor, N. (2018, March). Social Cognition and Team Assembly: Competence, Warmth, or Embeddedness. Paper presented at the *ATLAS Teams Research Incubator Weekend*, Evanston, IL, USA, March 16-18, 2018.

23. **Twyman, M.**, Lungeanu, A., DeChurch, L., & Contractor, N. (2018, January). The emergence and development of crew shared mental models: An agent-based model. Poster presented at the *NASA 2018 Human Research Program Investigators' Workshop*, Galveston, TX, January 22-25, 2018.
24. Contractor, N., DeChurch, L., Antone, W., **Twyman, M.**, Gibson, Z., Sawant, A., Gado, H., & Bell, S. (2018, January). Teamstar: A Tool for evaluating and mitigating space team risk. Poster presented at the *NASA 2018 Human Research Program Investigators' Workshop*, Galveston, TX, January 22-25, 2018.
25. DeChurch, L., Park, P., Lungeanu, A., **Twyman, M.**, & Contractor, N. (2018, January). CREST: Crew Recommender for Effectively Switching Tasks. Poster presented at the *NASA 2018 Human Research Program Investigators' Workshop*, Galveston, TX, January 22-25, 2018.

2017

26. **Twyman, M.**, Newman, D., DeChurch, L., & Contractor, N. (2017, October). Inviting Your Next Teammate: Algorithms and Acquaintances. Poster presented at *Organizational Communication Mini-Conference 2017*, Athens, Ohio, October 13-15, 2017.
27. **Twyman, M.**, Keegan, B. C., & Shaw, A. (2017, July). Black Lives Matter in Wikipedia: Collective Memory and Collaboration Around Online Social Movements. Poster presented at *2017 International Conference on Computational Social Science (IC2S2)*. Cologne, Germany, July 10-13, 2017.
28. **Twyman, M.**, DeChurch, L., & Contractor, N. (2017, June). Using a Network Approach for Modeling Shared Cognition of Astronaut Teams. Poster presented at *NetSci 2017 International School and Conference on Network Science*, Indianapolis, Indiana, June 19-23, 2017.
29. **Twyman, M.**, Ma, L., Srivatsa, M., Cansever, D., & Contractor, N. (2017, June). Searching Networks to Assemble Teams. Poster presented at *NetSci 2017 International School and Conference on Network Science*, Indianapolis, Indiana, June 19-23, 2017.
30. **Twyman, M.**, Ma, L., Srivatsa, M., Cansever, D., & Contractor, N. (2017, May). Searching Networks to Assemble Teams. Paper presented at *Army Research Laboratory Network Science Collaborative Technology Alliance Annual Technical Meeting*, Newark, Delaware, May 2-3, 2017.
31. DeChurch, L.A., Schultz, M., Johnson, J., Contractor, N.S., Mesmer-Magnus, J., Plummer, G., **Twyman, M.** (2017, January). Structured Text Analysis for Evaluating Shared Cognition. Paper presented at the *NASA Human Research Program Investigators' Workshop*, Galveston, TX, January 23-26, 2017.

2016

32. **Twyman, M.**, Newman, D., DeChurch, L., & Contractor, N. (2016, October). Networks of Computer-Mediated Team Assembly. Paper presented at the *Organizational Communication Mini-Conference 2016*, Evanston, Illinois, September 30-October 2, 2016.
33. **Twyman, M.**, Newman, D., DeChurch, L., & Contractor, N. (2016, July). The Ties that Form Teams: Self-Organization, Homophily, and Multiplexity. Paper presented at *Interdisciplinary Network for Group Research Conference*, Helsinki, Finland, July 14-16, 2016. ***Runner-up: "Best Student Paper" Award**
34. **Twyman, M.**, DeChurch, L. & Contractor, N. (2016, April). The Impact of Homophily and Multiplex Networks on the Assembly of Teams. Poster presented at *Sunbelt XXXVI Conference, International Network for Social Network Analysis*, Newport Beach, CA, April 5-10, 2016.
35. DeChurch, L., Contractor, N., Johnson, J., Mesmer-Magnus, J., Plummer, G., **Twyman, M.**, Niler, A., Larson, L. & Hernandez, I. (2016, February). SCALE: Shared Cognitive Architecture for Long-Distance Exploration. Poster presented at *NASA 2016 Human Research Program Investigators' Workshop*, Galveston, TX, February 8-11, 2016.

2015

36. **Twyman, M.**, Wax, A., DeChurch, L., & Contractor, N. (2015, July). Looking for Leadership: Understanding Team Assembly in a Web Technology. In A. Wax and M. Twyman (co-chairs),

Technologies for Studying and Enabling Teams. Symposium conducted at the *Interdisciplinary Network for Group Research Conference*, Pittsburgh, Pennsylvania, USA, July 23-25, 2015.

37. **Twyman, M.**, Wax, A., DeChurch, L., & Contractor, N. (2015, June). Emergence of Assembly & Leadership Networks in Teams. Poster presented at *NetSci 2015 International School and Conference on Network Science*, Zaragoza, Spain, June 1-5, 2015.

2010

38. **Twyman, M.** (2010, April). Sensor-activated electromagnetic track. Paper presented at *Ohio Space Grant Consortium Research Project Symposium*, Cleveland, Ohio, USA, April 16, 2010.

2009

39. Eyink, K., Grazulis, L., **Twyman, M.**, & Mahalingam, K. (2009, August). A Study of the Driving Force for the Self Assembly of Heterojunction Quantum Dots (Zero-D Molecules) Using Finite Element Analysis. Paper presented at *26th North American Molecular Beam Epitaxy Conference*, Princeton University, New Jersey, USA, August 9-12, 2009.

2007

40. **Twyman, M.**, Bozeman, J., Mawasha, P.R., & Yelamarthi, K. (2007, August). A Parametric Study on the Material Properties of a Shape Memory Polymer. Poster presented at *Ohio Student Research Forum*, Wright State University, Ohio, USA, August 9-10, 2007.

PROFESSIONAL MEMBERSHIPS

Academy of Management
American Society for Engineering Education
American Sociological Association
Association for Computing Machinery
Interdisciplinary Network for Group Research
International Communication Association
International Network for Social Network Analysis
National Communication Association
National Society of Black Engineers
Order of the Engineer
Society for Judgement and Decision Making
Tau Beta Pi Engineering Honor Society Ohio Mu Chapter

ACADEMIC SERVICE

REVIEWING

Grants

- **National Science Foundation (NSF) Grant Panel Member:** *Four panel reviews from 2021—2023*

Journals

- **Editorial Review Board:** *Information Systems Research (Special Issue on Analytical Creativity)*
- **Ad Hoc:** *Journal of Computer-Mediated Communication, Human Communication Research, Management Communication Quarterly, CSCW issues of the*

Proceedings of the ACM on Human Computer Interaction (PACM HCI), PLOS ONE, Small Group Research, The International Journal of Press/Politics

Conferences

- **Ad Hoc:** *Academy of Management, Computer-Supported Cooperative Work and Social Computing (CSCW 2020), Interdisciplinary Network for Group Research (INGRoup)*
- **Committee:** *International Communication Association (ICA 2024) - Computational Methods Division Top Student Paper*

PROFESSIONAL COMMUNITY SERVICE

International Communication Association (ICA)

- *2022-2024 Aubrey Fisher Mentorship Award Committee (Member term ends 2024)*

ANN-SONIC-NICO 10th International Workshop on Network Theory: Human AI Social Networks @ Work, May 18-20, 2023, Northwestern University, Evanston, IL

- *Workshop Organizer:* Created program and schedule, and coordinated panel on diversity in AI for an interdisciplinary workshop with over 50 attendees

Organizational Communication Mini-Conference 2016, Northwestern University, Evanston, IL

- *Program Committee:* Reviewed abstracts, created program and schedule, managed logistics, and coordinated events for a student-organized conference with over 100 attendees

UNIVERSITY SERVICE

University of Southern California (USC)

Annenberg School for Communication and Journalism

- **Long-Range Planning Committee**, Communication (*Member, 2023-2024*)
- **Search Committee:** Computational Communication Science and Artificial Intelligence (*Member 2022-2023*)
- **Annenberg Rules Refresh Committee** (*Member, 2022*)
- **Digital Social Media Admissions Committee**, Communication (*Applications Reader, 2021-2022*)
- **Digital Media Management Admissions Committee**, Communication (*Applications Reader, 2021-2022, 2023-2024*)
- **Faculty Retention Committee**, Journalism (*Member, 2021*)
- **Undergraduate Curriculum Committee**, Communication (*Member, 2020-2021, 2023-2024*)
- **Annenberg Resources and Mentoring** (*Faculty Mentor, 2020-2021*)
- **Annenberg Student Task Force** (*Faculty Committee Member, 2020-2021*)

- **PhD Admissions Committee**, Communication (*Applications Reader, 2019-2020*)

Northwestern University

The Graduate School

- **Child and Family Resources Advisory Board**: Developed strategies to increase engagement of graduate-student parents with university-provided funding and resources, including implementation of new programming

MENTORING

University of Southern California (USC)

PHD STUDENTS

Advising

- **Alejandro Alvarado Rojas** (Communication, current): co-advise w/ Manuel Castells

Dissertation Committees

- **Ho-Chun Herbert Chang** (Communication, 2023): first position, Assistant Professor at Dartmouth College in Quantitative Social Science
- **Zihao He** (Computer Science, current)
- **Julie Jiang** (Computer Science, current)
- **Eugene Lee** (Communication, current)
- **Akira Matsui** (Computer Science, 2022): first position, Assistant Professor at Yokohama National University College of Business Administration
- **Lichen Zhen** (Communication, 2024): first position, Assistant Professor at Pennsylvania State University Abington in Communications

Qualifying Exam Committees

- **Alejandro Alvarado Rojas, Ke “Maddie” Huang-Isherwood, Eugene Lee, Ashley Phelps, Abel Salinas, Lipei “Jack” Tang, Essence Wilson, and Lichen Zhen**

Research Assistants

- **Eugene Lee** (Communication, 2021-2023)
- **Yiqi Li** (Communication, 2020): first position, Assistant Professor at Syracuse University School of Information
- **Jingyi Sun** (Communication, 2020): first position, Assistant Professor at Stevens Institute of Technology
- **Han Kyul Kim** (Industrial Engineering, current)
- **Aleyeh Roknaldin** (Industrial Engineering, current)
- **Lichen Zhen** (Communication, 2021-2023)

First-Year Mentees

- **Alejandro Alvarado Rojas, Bumju Jung, and Jermaine Richards**

MASTERS STUDENTS

Research Assistants

- **Raka Bhattacharyya** (Communication Management, 2024)
- **Debyani Nayak** (Industrial Engineering, 2023-2024)
- **Namita Mutha** (Computer Science, 2021-2023)
- **Zhengan “Park” Piao** (Communication Data Science, 2023-2024)
- **Jiarui Xia** (Computer Science, 2024)
- **Yi Yang** (Communication Data Science, 2022-2023)
- **Xiaoci Zhang** (Industrial Engineering, 2023-2024)
- **Weiwei Zheng** (Communication, 2020-2021)
- USC Information Sciences Institute Center for Knowledge-Powered Interdisciplinary Data Science (CKIDS) Project Mentor for the “Investigations of a Data Science Online Community” Project
 - Team awarded “Best Interdisciplinary Data Science Team”
 - Mentee, **Devendra Swami**, awarded “Best Interdisciplinary Data Scientist”
 - Mentored four M.S. in Data Science students: **Jacob Bickman, Devendra Swami, Jae Young Kim, and Kevin Tsang**

UNDERGRADUATE STUDENTS

- Letter writer for undergraduate students who are attending or have attended graduate programs at **Harvard University, Oxford University, University of Pennsylvania, and University of Southern California**. Other students attend law schools, including **University of Pennsylvania Carey Law School and University of Southern California Gould School of Law**.

Independent Study/Honors Thesis Supervision

- **Sofia Piccioni**, Major: Communication – Mentor for Honors Thesis (2023-2024)
- **Taj Pinkner**, Major: Communication – Mentor for Honors Thesis (2022-2023)
- **Jessica Trolan**, Major: Communication – Mentor for Independent Research (2023)

Mentees

- **Noah Kim**, Major: Communication – Mentee in the Annenberg Resources and Mentoring (ARM) program (2020-2022)

Northwestern University

- **Brian Gee**, Major: Industrial Engineering

- **Yixian (Amy) Wang**, Major: Industrial Engineering and Mathematical Methods in the Social Sciences

MEDIA ENGAGEMENT

- **Podcast Guest on “The Annenverse - Technology and the Workplace: What Does the Future Hold?”** USC Annenberg School for Communication and Journalism
<https://theannenverse.buzzsprout.com/2170393/14114820>
- **Quoted in “First-Gen Social Media Users Have Nowhere to Go”** by Jason Parham, WIRED: <https://www.wired.com/story/first-gen-social-media-users-have-nowhere-to-go>
- **Expert Guest on “NEWs GEN: Should we be able to choose our own boss at the workplace?”** Arirang News, South Korea, October 2023:
https://youtu.be/A4iQS4JG_Gs?si=Rq_CBsoR7qb5m0oV&t=975
- **Expert Guest on “NEWs GEN: Where millennials, Gen Z want to work”** Arirang News, South Korea, April 2023: <https://youtu.be/ZwlhQOJ2fJQ?t=872>
- **Expert Guest on “NEWs GEN: Millennials and Gen Z say no to S. Korea’s 69-hour workweek proposal”** Arirang News, South Korea, March 2023:
<https://youtu.be/jbGwh2izeag?t=900>
- **Expert Guest on “News Center: Four-Day Work Week”** Arirang News, South Korea, July 2022: <https://youtu.be/xVb4l0PUdh8?t=1735>
- **Expert Guest on “The Daily Report: New Working Environment in Era of Living with COVID-19”** Arirang News, South Korea, October 2021:
<https://youtu.be/9lr3Pq6QGr8?si=9lpzFkllPunp2rxD>
- **Quoted in “Reimagining AI”** by Ted B. Kissell, USC Annenberg Magazine: <https://annenberg.usc.edu/news/research-and-impact/reimagining-ai>
- **Quoted in “As Algorithms Battle Biases, Researchers Say Hiring Software Must Be More Than Meets the A.I.”** by Tiernan Ray, Fortune: <https://fortune.com/2019/12/26/hiring-software-algorithm-artificial-intelligence-biased/>
- **Podcast Guest on “NUWorkWell: Navigating the Academic Job Search”** Northwestern University—The Graduate School initiative on Work, Life & Wellness:
<https://www.buzzsprout.com/245987/1129961-work-well-navigating-the-academic-job-search?play=true>

PROFESSIONAL RESEARCH EXPERIENCES AND ENGAGEMENTS

Los Angeles Angels Major League Baseball Team (Anaheim, CA)

- **Spring 2020: Research Collaborator in Sports Analytics**
Contact: Dr. Ryan Crotin
Description: Investigating team dynamics and organizational performance in competitive team environments

IBM TJ Watson Research Center (Yorktown Heights, NY)

- **Summer 2016: Research Intern in Cognitive Distributed Analytics**
Manager: Dr. Mudhakar Srivatsa, Mentor: Dr. Liang Ma
Description: Investigating team dynamics and organizational performance in competitive team environments

The MITRE Corporation (McLean, VA)

- **Summer 2013:** *Consulting Intern in Infrastructure, Operations, & IT Service Management*
Description: Developed internal materials for potential impact of automatic network discovery on telemental health group therapy practices for veterans with post-traumatic stress disorder (PTSD)

BJC HealthCare (St. Louis, MO)

- **Spring 2013:** *Project Management Intern in Clinical Engineering and Clinical Assets Management*
Description: Developed software for resource productivity tracking to streamline workflow for Displaced Assets Program (program saves \$4 million annually), and aided in buying medical devices (\$7 million purchase)
- **2012:** *Project Management Intern for Strategy and Development in Center for Clinical Excellence*
Description: Collected data and facilitated development of new processes in two hospitals, developed metrics and data visualization dashboard for process optimization of Displaced Assets Program

Joint Center for Political and Economic Studies (Washington, DC)

- **Summer 2011:** *Policy Research Intern in Media and Technology Institute*
Mentor: Dr. Nicol Turner-Lee (now at Brookings Institute)
Description: Researched policy on Broadband Internet, broadband adoption in USA, and networking architecture

GOVERNMENT RESEARCH EXPERIENCE

Wright Patterson Air Force Base (Dayton, OH)

- **2010-2012:** *Research Assistant in Human Performance Wing*
Description: Analyzed EEG signals, processed MRI images, and designed user interface for a research CT scanner. Funded MS in Biomedical Engineering
- **Summer 2009:** *Research Assistant in Sensors and Optics*
Description: Conducted finite element modeling of semiconductor materials using cluster computing. Funded by Chenega Federal Systems in Lorton, VA; granted Secret Clearance
- **2008-2012:** *Research Assistant in Sensors and Optics*
Description: Prepared microscope samples, operated multiple high-end instruments, and maintained lab space. Funded by Southwestern Ohio Council for Higher Education

RESEARCH EXPERIENCE AS A PHD STUDENT

Northwestern University: *Research Assistant*

- **2014—2019:** *Science of Networks in Communities (SONIC) Lab*
Advisor: Dr. Noshir Contractor

Description: Researched organizational topics with focus on social network analysis, team assembly, and network search strategies (finding teammates and collaborators). Participated in sponsored research projects funded by the NSF, NIH, ARL, and NASA

- **Spring 2014:** *Neuroscience and Robotics (NxR) Lab: Surface Haptics Group*
Primary Investigator: Dr. Ed Colgate
Description: Prototyped and developed software in Android for TPaD technology (touchscreen interfaces)
- **2013—2014:** *Inclusive Technology Lab*
Primary Investigator: Dr. Anne Marie Piper
Description: Designed and developed Android applications for a wearable user interface for visually impaired people

RESEARCH EXPERIENCE AT UNDERGRADUATE INSTITUTION

Wright State University

- **2009-2010:** *Research Scholar for NASA Ohio Space Grant Consortium*
Description: Won “Senior Scholarship for Research” Award. Built a sensor-activated electromagnet track, implemented an alternative design at United Rehabilitation Services of Greater Dayton
- **Summer 2009:** *Research Intern for NSF Ohio SEA Glenn-Stokes Program*
Description: Designed and conducted experiment for material properties of shape memory polymers