

Daniel M. Romero

Associate Professor

University of Michigan
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EDUCATION

- Ph.D., Applied Mathematics** 2012
Cornell University (Ithaca, NY)
Advisor: Jon Kleinberg
Thesis: *Dynamics of Social Network Evolution and Information Diffusion*
- M.S., Mathematics** 2007
Arizona State University (Tempe, AZ)
Advisors: Carlos Castillo-Chavez and Svetlana Roudenko
- B.S., Mathematics, Summa Cum Laude** 2006
Arizona State University (Tempe, AZ)

RESEARCH INTERESTS

My main research interest is the empirical and theoretical analysis of Social and Information Networks. I am particularly interested in understanding the mechanisms involved in network evolution, information diffusion, and interactions among people on the Web and in complex organizations.

EMPLOYMENT

- University of Michigan**
School of Information
Center for the Study of Complex Systems
Computer Science and Engineering (by courtesy)
Associate Professor 2020 – Present
Assistant Professor 2015 – 2020
- University of Michigan** 2014 – 2015
School of Information
President's Postdoctoral Fellow

Northwestern University Northwestern Institute on Complex Systems Postdoctoral Fellow	2012 – 2013
Microsoft Research Research Intern, Search Labs	May - Aug. 2011
Hewlett-Packard Research Intern, Social Computing Lab	May - Aug. 2010
Microsoft Research Research Intern, Microsoft Research New England	June - Aug. 2009
Hewlett-Packard Research Intern, Social Computing Lab	May - Dec. 2008

FELLOWSHIPS AND AWARDS

2025 Association for Computing Machinery (ACM) Distinguished Member

Test of Time Award for the paper “Influence and Passivity in Social Media” at the 2021 European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML PKDD), 2021.

Coursera’s Outstanding Educator Award for Innovation (with Chris Brooks, Kevyn Collins-Thompson, Vinod Vydiswaran), 2018.

Best Paper Award for “Social Networks Under Stress” in the International World Wide Web Conference (WWW) 2016.

President's Postdoctoral Fellowship, University of Michigan, 2014.

Sloan Fellowship, Cornell University, 2008-2011.

Best poster award at for “Differences in the Mechanics of Information Diffusion Across Topics: Idioms, Political Hashtags, and Complex Contagion on Twitter” at Northwestern University Complexity Conference 2011.

NSF IGERT (Integrative Graduate Education and Research Traineeship) Fellow, Cornell University, 2007-2008.

LSAMP-BD (Louis Stokes Alliance for Minority Participation Bridge to the Doctorate) Fellowship, Arizona State University, 2005-2007.

Charles Wexler Mathematics Award, Arizona State University, 2004.

PUBLICATIONS

Student and postdoc co-authors are underlined after 2015.

Journal Publications:

H. Peng, M. Teplitskiy, D.M. Romero, and E-Á. Horvát. "The Gender Gap in Scholarly Self-Promotion on Social Media." *Nature Communications*, 16, 5552, 2025.

S. Xiang, D.M. Romero, and M. Teplitskiy. "Evaluating interdisciplinary research: Disparate outcomes for topic and knowledge base" *Proc. National Academy of Sciences (PNAS)*, (16) e2409752122, 2025.

J. Córdova, E-Á. Horvát, and D.M. Romero. "Timing and Cross-Platform Presence Shape the Online Dissemination of Science." *EPJ Data Science*, 14, 63, 2025.

S. Xiang, D.M. Romero, and M. Teplitskiy. "Research Topic Choice: Motivations, Strategies, and Consequences." *Quantitative Science Studies*, 1-66, 2025

Y. Yu, X. Li, T. Li, P. Dhillon, and D.M. Romero. "Demographic Disparity in Wikipedia Coverage: A Global Perspective." *EPJ Data Science*, 14, 15, 2025.

Y. Yu and D.M. Romero. "Does the Use of Unusual Combinations of Datasets Contribute to Greater Scientific Impact?" *Proc. National Academy of Sciences (PNAS)*, 121 (41) e2402802121, 2024.

A. Ananthasubramaniam, D. Jurgens, D.M. Romero. "Networks and Identity Drive the Spatial Diffusion of Linguistic Innovation in Urban and Rural Areas." *npj Complexity*, 2024.

M. Choi, D.M. Romero, D. Jurgens. "Profile Update: The Effects of Identity Disclosure on Network Connections and Language." *EPJ Data Science*, 2024.

A.N. Bhogal, V. Berrocal, D.M. Romero, M. Willis, V.G.V. Vydiswaran, T.C Veinot. "Social acceptability of health behavior posts on social media: an experiment." *American Journal of Preventive Medicine*, 2024.

D. Maldeniya, M. De Choudhury, D. Garcia, D.M. Romero. “Pulling Through Together: Social Media Trajectories of Recovery in Disaster Stricken Communities.” *Journal of Computational Social Science*, 2023.

H. Peng, D.M. Romero, and E-Á. Horvát. “Dynamics of Cross-Platform Attention to Retracted Papers.” *Proc. National Academy of Sciences (PNAS)*, 119 (25) e2119086119, 2022.

T. C. Veinot, P. J., Clarke, D.M. Romero, L.R. Buis, T.R. Dillahunt, V.G.V. Vydiswaran, A. Beals, L. Brown, O. Richards, A. Williamson, and M.G. Antonio. (2022). “Equitable Research PRAXIS: A Framework for Health Informatics Methods”. *IMIA Yearbook of Medical Informatics*, 31(01), 307-316, 2022.

H. Peng, Q. Ke, C. Budak, D.M. Romero, and Y.Y. Ahn. “Neural Embeddings of Scholarly Periodicals Reveal Complex Disciplinary Organizations.” *Science Advances*, 2021.

H. Peng, A. Nematzadeh, D.M. Romero, and E. Ferrara "Network Modularity Controls the Speed of Information Diffusion." *Phys. Rev. E*, 102, 052316, 2020.

V.G.V. Vydiswaran, D.M. Romero, X. Zhao, D. Yu, I. Gomez-Lopez, J.X. Lu, B. Iott, A. Baylin, E.C. Jansen, P. Clarke, V.J. Berrocal, R. Goodspeed, T. Veinot. “Uncovering the relationship between food-related discussion on Twitter and neighborhood characteristics.” *Journal of the American Medical Informatics Association (JAMIA)*, 27(2), 254-264, 2020.

E.L. Platt and D.M. Romero. “Towards attack tolerant networks: Concurrent multipath routing and the butterfly network.” *PLoS ONE*, 14(4), 2019.

D.M. Romero, B. Uzzi, J. Kleinberg. "Social Networks under stress: Specialized Team Roles and their Communication Structure." *ACM Transactions on the Web (TWEB)*, Volume 13, Issue 1, Article 6, 2019.

Y. Shen, P. Clarke, I. Gomez-Lopez, A.B. Hill, D.M. Romero, R. Goodspeed, V. J. Berrocal, V.G.V Vydiswaran, and T. Veinot. “Using Social Media to Assess the Community Food Store Environment: Comparing Yelp Reviews with a Direct Observation Audit Instrument for Grocery Stores.” *Public Health Nutrition*, 2018

R. Goodspeed, X. Yan, J Hardy, V.G.V. Vydiswaran, V. Berrocal, P. Clarke, D.M. Romero, I. Gomez-Lopez, and T. Veinot. “Comparing the Data Quality of Global Positioning System Devices and Mobile Phones for Assessing Relationships Between Place, Mobility, and Health: Field Study.” *JMIR Mhealth and Uhealth*, 6(8):e168, 2018.

J. Hardy, T.C. Veinot, X. Yan, V.J. Berrocal, P. Clarke, R. Goodspeed, I.N. Gomez, D.M. Romero, and V.G.V. Vydiswaran. "User Acceptance of Location-Tracking Technologies in Health Research: Implications for Study Design and Data Quality." *Journal of Biomedical Informatics*, 2018.

S. Mukherjee, D.M. Romero, B. Jones, and B. Uzzi, "The Nearly Universal Link Between the Age of Past Knowledge and Tomorrow's Breakthroughs in Science and Technology: The Hotspot." *Science Advances*, 2, 2017.

I. Gomez-Lopez, P. Clarke, A.B. Hill, D.M. Romero, R. Goodspeed, V. Berrocal, V. Vydiswaran, and T.C. Veinot. "Using Social Media to Identify Sources of Healthy Food in Urban Neighborhoods." *Journal of Urban Health*, 2017.

* L. Robert and D.M Romero. "The Influence of Diversity and Experience on the Effects of Crowd Size." *Journal of the Association for Information Science and Technology (JASIST)*, 2016.

D.M. Romero, R.I. Swaab, B. Uzzi, and A.D. Galinsky. "Mimicry is Presidential: Linguistic Style Matching in Presidential Debates and Improved Polling Numbers." *Personality and Social Psychology Bulletin*, Vol. 41(10) 1311-1319, 2015.

C. Kuehn, E.A. Martens, and D.M. Romero. "Critical Transitions in Social Network Activity." *Journal of Complex Networks*, 2(2), 141-152, 2014.

D.M. Romero, C. Kribs-Zaleta, Anuj Mubayi, and Clara Orbe, "An Epidemiological Approach to the Spread of Third Political Parties," *Discrete and Continuous Dynamical Systems - B*, 15, 707-738, 2011.

S. Yardi, D. M. Romero, G. Schoenebeck, and d. boyd, "Detecting spam in a Twitter network," *First Monday*, Volume 15, Number 1, 2010

* B.A. Huberman, D.M. Romero, and F. Wu, "Social networks that matter: Twitter under the microscope," *First Monday*, Volume 14, Number 1, 2009

* B.A. Huberman, D.M. Romero, and F. Wu, "Crowdsourcing, attention, and productivity," *Journal of Information Sciences*, volume 35, number 6, pp. 758-765, 2009.

Peer-Reviewed Conference Publications:

J. Córdova, T. Hirose, H. Shi, E-Á Horvát, and D.M. Romero. “Multiplatform Early Predictors of Academic Articles’ Visibility and Citations.” Proc. ACM Collective Intelligence Conference (CI), 2025.

M. Bhat, D.M. Romero, and E-Á Horvát. “Scholarly Disengagement as an Epistemic Crisis: Clickbait, Credibility, and the Decline of Public-Facing Science.” Proc. ACM Collective Intelligence Conference (CI), 2025.

A. Ananthasubramaniam, Y. Zhu, D. Jurgens, and D.M. Romero. “Roles of Network and Identity in Hashtag Diffusion.” Proc. The Web Conference (WWW), 2025.

Y. Yu, H. Chen, D.M. Romero, and P. Dhillon. “Signals in the Noise: Decoding Unexpected Engagement Patterns on Twitter.” Proc. 28th ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW), 2025.

D. Gamba, Y. Yu, Y. Yuan, G. Schoenebeck, and D.M. Romero. “Exit Ripple Effects: Understanding the Disruption of Socialization Networks Following Employee Departures.” Proc. The Web Conference (WWW), 2024.

H.K. Dambanemuya, D.M. Romero, and E-Á Horvát. “Emergent Influence Networks in Good-Faith Online Discussions.” Proc. 18th International AAAI Conference on Web and Social Media (ICWSM), 2024.

M. Choi, D. Jurgens, and D.M. Romero. “Analyzing the Engagement of Social Relationships During Life Event Shocks in Social Media.” Proc. 17th International AAAI Conference on Web and Social Media (ICWSM), 2023.

S. Hwang, E-Á Horvát, and D.M. Romero. “Information Retention in the Multiplatform Sharing of Science.” Proc. 17th International AAAI Conference on Web and Social Media (ICWSM), 2023.

P. Vaghela, R.K. Mothilal, D.M. Romero, and J. Pal. “Caste Capital On Twitter: A Formal Network Analysis Of Caste Relations Among Indian Politicians.” Proc. 25th ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW), 2022.

M. Choi, C. Budak, D.M. Romero, and D. Jurgens. “More than meets the tie: Examining the Role of Interpersonal Relationships in Social Networks” Proc. 15th International AAAI Conference on Web and Social Media (ICWSM), 2021.

D. Maldeniya, C. Budak, L. Robert, and D.M. Romero. "Herding a Deluge of Good Samaritans: How GitHub Projects Respond to Increased Attention." Proc. of The Web Conference (WWW), 2020.

T. Ammari, S. Schoenebeck, and D.M. Romero. "How Self-declared Throwaway Accounts Enable Parenting Disclosure and Support on Reddit." Proc. 22nd ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW), 2019.

F. Zhang, R. Wang, E. Blohm, C. Budak, L. Robert, and D.M. Romero. "Participation of New Editors After Times of Shock on Wikipedia." Proc. 13th International AAAI Conference on Web and Social Media (ICWSM), 2019.

T. Cunha, D. Jurgens, C. Tan, and D.M. Romero. "Are All Successful Communities Alike? Characterizing and Predicting the Success of Online Communities" Proc. of The Web Conference, (WWW), 2019.

H. Peng, C. Budak, and D.M. Romero. "Event-Driven Analysis of Crowd Dynamics in the Black Lives Matter Online Social Movement" Proc. of The Web Conference (WWW), Short paper, 2019.

E.L. Platt and D.M. Romero. "Network Structure, Efficiency, and Performance in WikiProjects." Proc. 12th International AAAI Conference on Web and Social Media (ICWSM), 2018.

V.G.V. Vydiswaran, D.M. Romero, X. Zhao, D.Yu, I. Gomez-Lopez, J.X. Lu, B. Iott, A. Baylin, P. Clarke, V. Berrocal, R. Goodspeed, and T. Veinot. "'Bacon Bacon Bacon': Food-related Tweets and Sentiment in Metro Detroit." Proc. 12th International AAAI Conference on Web and Social Media (ICWSM), Short paper, 2018.

S. Chakraborty, J. Pal, P. Chandra, and D.M. Romero. "Political Tweets and Mainstream News Impact in India: A Mixed Methods Investigation into Political Outreach." Proc. ACM Conference on Computing and Sustainable Societies (COMPASS), 2018.

T. Ammari, S. Schoenebeck, and D.M. Romero. "Pseudonymous Parents: Comparing Parenting Roles and Identities on the Mommit and Daddit Subreddits." Proc. ACM Conference on Human Factors in Computing (CHI), 2018.

F. Zhang, D. Livneh, C. Budak, L. Robert, and D.M. Romero. "Crowd Development: The Interplay Between Crowd Evaluation and Collaborative

Dynamics in Wikipedia.” Proc. 21st ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW), 2018.

F. Zhang, D. Livneh, C. Budak, L. Robert, and D.M. Romero. "Shocking the Crowd: The Effect of Censorship Shocks on Chinese Wikipedia." Proc. 11th International AAI Conference on Web and Social Media (ICWSM), 2017.

D. Maldeniya, A. Varghese, T. Stuart, and D.M. Romero. "The Role of Optimal Distinctiveness and Homophily in Online Dating." Proc. 11th International AAI Conference on Web and Social Media (ICWSM), Short paper, 2017.

D.M. Romero, K. Reinecke, and L. Robert. "The Influence of Early Respondents: Information Cascade Effects in Online Event Scheduling." Proc. 10th ACM Conference on Web Search and Data Mining (WSDM), 2017.

D.M. Romero, B. Uzzi, and J. Kleinberg. "Social Networks Under Stress." Proc. 25th ACM International World Wide Web Conference (WWW), 2016. (**Best Paper Award**)

D.M. Romero, D. Huttenlocher, and J. Kleinberg. "Coordination and Efficiency in Decentralized Collaboration." Proc. 9th International AAI Conference on Weblogs and Social Media (ICWSM), 2015.

* L. Robert and D.M. Romero. "Crowd Size, Diversity and Performance." Proc. ACM Conference on Human Factors in Computing (CHI), 2015.

* N. Mishra, D.M. Romero, and P. Tsaparas. "Estimating the Relative Utility of Networks for Predicting User Activities." Proc. of the 22th ACM International Conference on Information and Knowledge Management (CIKM), 2013.

* D.M. Romero, C. Tan, and J. Ugander. "On the Interplay between Social and Topical Structure." Proc. 7th International AAI Conference on Weblogs and Social Media (ICWSM), 2013.

D.M. Romero, B. Meeder, and J. Kleinberg "Differences in the Mechanics of Information Diffusion Across Topics: Idioms, Political Hashtags, and Complex Contagion on Twitter." Proc. 20th ACM International World Wide Web Conference (WWW), 2011.

J. Cheng, D.M. Romero, B. Meeder, J. Kleinberg. "Predicting Reciprocity in Social Networks." Proc. 3rd IEEE Conference on Social Computing (SocialCom), 2011.

D.M. Romero, B. Meeder, V. Barash, and J. Kleinberg "Maintaining Ties on Social Media Sites: The Competing Effects of Balance, Exchange, and Betweenness." Proc. 5th International AAI Conference on Weblogs and Social Media (ICWSM), Short paper, 2011.

D.M. Romero, W. Galuba, S. Asur, and B.A. Huberman "Influence and Passivity in Social Media." Proc. European Conference on Machine Learning and Knowledge Discovery in Databases (ECML PKDD), 2011. **(2021 Test of Time Award)**

M.J. Brzozowski and D.M. Romero "Who Should I Follow? Recommending People in Directed Social Networks." Proc. 5th International AAI Conference on Weblogs and Social Media (ICWSM), Short paper, 2011.

D.M. Romero and Jon Kleinberg, "The Directed Closure Process in Information Networks with an Analysis of Link Formation on Twitter," Proc. 4th International AAI Conference on Weblogs and Social Media (ICWSM), 2010.

* Author names are listed in alphabetical order.

RESEARCH GRANTS

E-Á Horvát (Northwestern PI), N. Diakopoulos (Northwestern co-PI), D.M. Romero (Michigan PI), "Collaborative Research: HCC: Small: Science communication in the ecosystem of digital media platforms" **National Science Foundation** (\$421,446 Northwestern, \$78,553 Michigan), February 2022 – January 2026.

D. Jurgens (PI), D.M. Romero (co-PI), "CHS: Small: The Ties that Relate Us: Modeling the Impact of Relationships on Social Contagion and Network Dynamics," **National Science Foundation** (\$499,925), October 2020 – September 2025.

D.M. Romero (PI), D. Jurgens, "Developing a relationship aware disinformation flow model for testing data analytic methods," **Sandia National Laboratories** (\$52,000), February 2022 – September 2022.

D.M. Romero (PI), "Assessing the Impact of Exogenous Shocks on User Behavior and Information Diffusion in Social Media," **Air Force's Young Investigator Research Program (YIP)** (\$450,000), January 2019 – December 2021.

D.M. Romero (PI), C. Budak, L. Robert, "CHS: Small: Large-Scale Examination of the Impact of Shocks on Crowd Attributes and Performance in Collaborative Volunteering Systems," **National Science Foundation** (\$515,463), September 2016 – August 2020.

D.M. Romero, D. Jurgens, J. Huang (PIs), “Measuring the Impact of Early Stage Characteristics on Long Term Success of Online Communities,” **University of Michigan MCubed 3.0 Program** (\$60,000), March 2019 – December 2020.

Quan Nguyen (PI), Chris Brooks, D.M. Romero, Benjamin Koester, Tim McKay, "Students' Mobility Patterns on Campus and the Implications for the Recovery of Campus Activities Post-Pandemic," **MIDAS Propelling Original Data Science (PODS)** (\$30,000), June-December 2020.

V.G.V. Vydiswaran, T. Veinot, D.M. Romero (PIs), “Mining Social Media to Characterize Community: Sustaining MCubed-initiated research,” **University of Michigan Medical School** (\$60,000), March 2019 – February 2020.

V.G.V. Vydiswaran, T. Veinot, D.M. Romero (PIs), “Mining Social Media to Characterize Community” **University of Michigan MCubed 2.0 Program** (\$60,000), March 2017 – February 2018.

T.C. Veinot (PI), V. Berrocal, P. Clarke, R. Goodspeed, and D.M. Romero, “A ‘Big Data’ Approach to Understanding Neighborhood Effects in Chronic Illness Disparities,” **Social Sciences Annual Institute Round 6** (\$94,948) and **Sloan & Moore Foundations** (\$60,000), May 2015 – April 2016. (Co-investigator).

Ph.D. AND POSTDOC ADVISING

Aparna Ananthasubramaniam (Ph.D. Candidate, co-advised with Kristin Seefeldt), 2019 – Present

David Gamba (Ph.D. Candidate, co-advised with Grant Schoenebeck), 2022 – Present

Dr. Yulin Yu (Graduated 2025), 2021 – 2025

Dr. Danaja Maldeniya (Graduated 2023), 2017 – 2023

Dr. Minje Choi (Graduated 2023, co-advised with David Jurgens), 2018 – 2023

Dr. Chris Quarles (Graduated 2023, co-advised with Scott Page), 2022 – 2023

Dr. Hao Peng (Graduated 2022), 2017 – 2022

Dr. Ed Platt (Graduated 2022), 2016 – 2022

Dr. Abraham Israeli (Postdoctoral Fellow), 2023 – 2025

Dr. Patrick Park (Former Michigan Data Science Fellow), 2019 – 2021

Dr. Tiago Cunha (Former Postdoctoral Fellow), 2018 – 2019

DISSERTATION COMMITTEE CHAIR

Yulin Yu (Ph.D. 2025, School of Information)

Dissertation Title: “The Future of Creativity: Exploring How Novel Uses of Data and AI Shape Innovation — A Quantitative Approach”

Danaja Maldeniya (Ph.D. 2023, School of Information)

Dissertation Title: “Adaptation to Exogenous Shocks: Community, Team, and Individual Perspectives on the Social Web”

Chris Quarles (Ph.D. 2023, School of Information)

Dissertation Title: “Systemic Inequality, Technological Innovation, and the Limits of Human Understanding”

Minje Choi (Ph.D. 2023, School of Information)

Dissertation Title: “A Computational Analysis on the Role of Social Relationships in Online Communication and Information Diffusion”

Hao Peng (Ph.D. 2022, School of Information)

Dissertation Title: “Gender and Ethnic Disparities in Science Production and Dissemination”

Ed Platt (Ph.D. 2022, School of Information)

Dissertation Title: “Network Deliberation: The Role of Network Structure in Large-Scale, Internet-Enabled, Participatory Decision-Making”

DISSERTATION COMMITTEE MEMBER

Henry Dambanemuya (Ph.D. 2024, Technology and Social Behavior, Northwestern University)

Dissertation Title: “Collective Intelligence in Crowd-Based Systems”

Jiaqi Ma (Ph.D. 2022 School of Information)

Dissertation Title: “Towards Trustworthy Machine Learning on Graph Data”

Shiyan Yan (Ph.D. 2021 School of Information)

Dissertation Title: “Axiomatic Analysis of Unsupervised Diversity on Large-Scale High-dimensional Data”

Tawfiq Ammari (Ph.D. 2020 School of Information)

Dissertation Title: “Social Role Transitions and Technology: Societal Change and Coping in Online Communities”

Biaoshuai Tao (Ph.D. 2020 Electrical Engineering and Computer Science)

Dissertation Title: “Complexity, Algorithms, and Heuristics of Influence Maximization”

Wei Ai (Ph.D. 2019 School of Information)

Dissertation Title: “Promoting Pro-social Behavior with End-to-end Data Science”

Brandon Oselio (Ph.D. 2019 Electrical Engineering and Computer Science)

Dissertation Title: “Models and Inference with Network Structure”

Ark Zhang (Ph.D. 2018 School of Information)

Dissertation Title: “Motivating Contributions to Public Information Goods”

Cheng Li, (Ph.D. 2017 School of Information)

Dissertation Title: “End-to-end Learning for Mining Text and Network Data.”

Pin-Yu Chen, (Ph.D. 2016 Electrical Engineering and Computer Science)

Dissertation Title: “Analysis and Actions on Graph Data.”

UNDERGRADUATE AND MASTER’S STUDENTS

Sidney Xiang (MS Student), 2022 – 2025

Louise Zhu (MS Student), 2022 – 2024

Amanda Hardy (MS Student), 2020 – 2021

Xingyu Lu (Undergraduate Student), 2020 – 2021

Xingyao Wang (Undergraduate Student) 2019 – 2022

Eric Lian (Undergraduate Student), 2019 – 2020

Herminio Bodon (REMS Program), 2019 – 2020

Yulin Yu (MS Student), 2019 – 2020

Yin Yin (MS Student), 2019

Ziyang Ji (Undergraduate Student), 2018 – 2019

Arushi Jain (MS Student), 2018 – 2019

Jiaxin Ye (Undergraduate Student), 2018 – 2019

Stella Seonghwa Choi (MS Student), 2017 – 2018

Ruihan Wang (MS Student), 2017 – 2018
Muhan Yuan (MS Student), 2017 – 2018
Eric Blohm (Undergraduate Student), 2017 – 2018
Arun Varghese (MS Student), 2016 – 2017
Karthik Ramanathan (MS Student), 2016 – 2017
Danielle Livneh (Undergraduate Student), 2016 – 2017

INVITED SCHOLARLY PRESENTATIONS

Keynote at the International Conference on Social Computing (ICSC): “Networks, Identity, and the Diffusion of Cultural Innovation”, Shanghai, China, 2025.

Invited talk on “Networks and Identity Drive Geographical Properties of the Diffusion of Linguistic Innovation” Computer Science Colloquium. Dartmouth College, Hanover, NH, 2023.

Invited talk on “Networks and Identity Drive Geographical Properties of the Diffusion of Linguistic Innovation” R U Social Conference. Arison School of Business at Reichman University, Herzliya, Israel, 2023.

Invited talk on “Networks and Identity Drive Geographical Properties of the Diffusion of Linguistic Innovation” Northwestern Institute of Complex Systems (NICO) Seminar. Northwestern University, Evanston, IL, 2022.

Invited talk on “Large-Scale Examination of Shocks on Collaborative Volunteering Systems” Applied Mathematics Seminar. Utah State University, Logan, UT, 2021.

Invited talk on “Large-Scale Examination of Shocks on Collaborative Volunteering Systems” Indraprastha Institute of Information Technology, Delhi, India, 2021.

Invited talk on “Shocking the Crowd: The Effect of Censorship Shocks on Chinese Wikipedia.” Wikimedia Foundation Research Showcase, 2021.

Invited lecture on “Introduction to Social Network Analysis.” Course on Investigative Methods in Population Health, University of Ottawa, Ottawa, Canada 2019.

Keynote at the 3rd International Workshop on Event Analytics using Social Media Data (EASM): “Examining the Impact of Shocks on Collaborative Crowdsourcing”, Stanford, CA, 2018.

Invited talk on “Examining the Impact of Shocks on Collaborative Crowdsourcing” at the Crowdsourcing and Collective Intelligence (CCI) Workshop, Boston, MA, 2018.

Keynote at the Third International Conference on Computational Social Science (IC2S2): “Examining the effects of exogenous shocks on social networks and the collaborative dynamics in organizations and crowds”, Cologne, Germany, 2017.

Invited talk at the Workshop on Social Media and Demographic Research: “The Role of Optimal Distinctiveness and Homophily in Online Dating”, Montreal, Canada, 2017.

Invited talk at the Symposium on Computational Social Science: “Examining the effects of exogenous shocks on social networks and the collaborative dynamics in organizations and crowds”, ETH Zurich, Switzerland 2017.

Invited talk at Ford Motor Company: “Examining the effects of exogenous shocks on social networks and the collaborative dynamics in organizations and crowds”, Dearborn, MI, 2017.

Institute for Pure and Applied Mathematics (IPAM): Invited talk on “Social Networks Under Stress” UCLA, Los Angeles, CA, 2016.

Management & Organizations Seminar: Invited talk on “Structure and Content Changes in Social Networks Under Stress” Northwestern University, Evanston, IL, 2015.

WebSci 2014: Invited talk on “Analyzing the Frontiers of Science.” The web of scientific knowledge Workshop. Bloomington, IN.

NetSci 2014: Invited talk on “Analyzing the Frontiers of Science.” Cooperative Team Networks Workshop. Berkeley, CA.

INFORMS 2013: Invited talk on “Expert Communication Networks for Market Change Predictions.” Minneapolis, MN.

Research Carnival at Yahoo! Research 2011: Invited talk on “Differences in the Mechanics of Information Diffusion Across Topics: Idioms, Political Hashtags, and Complex Contagion on Twitter.” Bangalore, India.

SCHOLARLY PRESENTATIONS AT THE UNIVERSITY OF MICHIGAN

Invited talk on “Networks and Identity Drive Geographical Properties of the Diffusion of Linguistic Innovation” Management and Organizations Seminar Series. Ross School of Business. University of Michigan, Ann Arbor, MI, 2024.

Invited workshop on “Network Analysis: Overview and Applications to Population Science.” Population Dynamics and Health Program, University of Michigan, Ann Arbor, MI, 2019 (with Ceren Budak).

Invited talk on “Social Networks Under Stress.” Cognitive Science Community Student Group, University of Michigan, Ann Arbor, MI, 2018.

Complex Systems Seminar: Invited talk on “Structure and Content Changes in Social Networks Under Stress” University of Michigan, Ann Arbor, MI, 2015.

Michigan Interactive & Social Computing Seminar (MISC): Invited talk on “On-line Information Diffusion: From General Principles to Sources of Variation.” University of Michigan, Ann Arbor, MI, 2014.

Applied and Interdisciplinary Mathematics Seminar (AIM): Invited talk on “Understanding Social Behaviors through the Lens of Online Activities.” University of Michigan, Ann Arbor, MI 2014.

OTHER SCHOLARLY PRESENTATIONS

Second International Conference on Computational Social Science (IC2S2): “Social Networks Under Stress”, Evanston, IL 2016

Conference on Complex Systems (CCS): “Social Networks Under Stress”, Tempe, AZ 2015

SIAM Conference on Computational Science and Engineering: Invited talk in “Social Networks Under Stress” Salt Lake City, UT 2015

Northwestern University Department of Communication Studies: Invited talk on “Temporal Dynamics of Communication Networks: Trade-Offs, External Shocks, and Efficiency” Evanston, IL 2014

Management of Organizations Seminar: Invited talk on “Temporal Dynamics of Communication Networks: Trade-Offs, External Shocks, and Efficiency” University of California, Berkeley, CA 2014

Artificial Intelligence Seminar: “Temporal Dynamics of Communication Networks: Trade-Offs, External Shocks, and Efficiency” Cornell University, Ithaca, NY 2014

SciTs 2014: “Analyzing the Frontiers of Science.” Austin, TX

NetSci 2014: “Predicting Group Decisions from Communication Structure.” Berkeley, CA

NetSci 2014: “Estimating the Relative Utility of Networks for Predicting User Activities” Multiple Network Modeling, Analysis and Mining Workshop. Berkeley, CA

NetSci 2013: “Expert Communication Networks for Market Change Predictions.” Copenhagen, Denmark.

AMS/MAA Joint Meeting 2006. San Antonio, Texas.

Blackwell-Tapia Conference (IMA Institute at the University of Minnesota). Minneapolis, Minnesota 2006

Society for the Advancement of Chicanos and Native Americans in the Sciences (SACNAS) National Conference. Denver, Colorado 2005

American Mathematical Society (AMS) Mathfest. Albuquerque, New Mexico 2005

PROFESSIONAL SERVICE

Journal Editorial Positions:

Senior Associate Editor, ACM Transactions on Social Computing, 2025- Present

Associate Editor, European Physical Journal (EPJ) Data Science, 2018 - Present

Associate Editor, Applied Network Science, 2015 - Present

Organization of Conferences and Workshops:

Editor-in-Chief, International AAAI Conference on Weblogs and Social Media (ICWSM), 2025 – Present

Steering Committee Member, International AAAI Conference on Weblogs and Social Media (ICWSM), 2024 – Present

Review Quality Assurance Committee Member, AAAI Conference on Weblogs and Social Media (ICWSM), 2024 – 2025.

Program Co-Chair, 18th International AAAI Conference on Weblogs and Social Media (ICWSM), 2024.

Co-organizer of “3rd International Workshop on Scientific Knowledge Representation, Discovery, and Assessment (Sci-K 2023),” The Web Conference, 2023

Workshops Co-Chair. 15th International AAAI Conference on Weblogs and Social Media (ICWSM), 2021.

Co-organizer of “Beyond Online Data Workshop: Tackling Important Social Science Questions” (co-organized with Michael Macy, Amit Sharma, and Chenhao Tan), International AAAI Conference on Weblogs and Social Media (ICWSM), Stanford, CA, 2018.

Organizer of “Politicians and Social Media in the Global South Workshop” (co-organized with Joyojeet Pal, Ceren Budak, and Ram Mahalingam), Ann Arbor, MI, 2018.

Program Committee Member:

WWW (The Web Conference), 2011-2013, 2015-2025

ICWSM (International Conference on Web and Social Media), 2013, 2016-2025

WSDM (ACM’s Web Search and Data Mining), 2018 – 2020, 2023-2024

CSCW (Conference on Computer-Supported Cooperative Work and Social Computing), 2020 - 2023

SocInfo (International Conference on Social Informatics), 2019

NetSci (International School and Conference on Network Science), 2017

HCOMP (Conference on Human Computation and Crowdsourcing), 2016

HT (ACM’s Hypertext and Social Media), 2012-2015

Web Science (ACM’s International Web Science Conference), 2013-2015

Social Com (IEEE's International Conference on Social Computing), 2012

DNA-SDM (Workshop on Dynamic Network Analysis), 2012

Reviewing: PNAS (Proceedings of the National Academy of Sciences), PNAS Nexus, Nature Human Behavior, Nature Communications, Nature Computational Science, Network Science, Scientific Reports, PlosOne, Physics Letters A, EPJ (European Physical Journal) Data Science, Data Mining and Knowledge Discovery, New Media & Society, Physica A, IEEE (Institute of Electrical and Electronics Engineers) Transactions on Network Science and Engineering, ACM (Association of Computing Machinery) TIST Special Issue on Twitter, Journal of Marketing Communications Special Issue on Word of Mouth and Social Media, Journal of the Royal Society Interface.

Grant Reviewing:

National Science Foundation Panelist and Reviewer
Army Research Office (ARO) Reviewer

University Level Service:

Faculty Grievance Procedure Working Group, 2024 - 2025

School of Information Dean Search Committee, 2022 - 2023

MIDAS postdoctoral fellowship application reviewer, 2022 - 2023

President's Postdoctoral Fellowships Program Advisory Committee, 2021- 2022

President's Postdoctoral Fellowships Program Advisory Committee, 2020 - 2021

UMSI Representative to the Master of Science in Data Science (MSDS) degree, 2019-2020.

Co-developed interactive Python labs for UM instructors interested in including Computational Social Science in their courses (with Elizabeth Bruch), 2017 - 2019

Co-organized invited talks and tutorials for the UM Computational Social Science Initiative (with Elizabeth Bruch), 2017-2018

Co-organized the Michigan Symposium on Modeling Human Behavior and Social Dynamics (with Elizabeth Bruch, March Newman, and Lynette Shaw), 2018

UMSI Service:

Doctoral Program Director, 2023 – Present
Academic Program Council, 2023 – Present
Internal Faculty Grievance, 2023 – Present
Recruiting Success Liaison, 2024 – 2025
Dean's Advisory Committee, 2017-2018, 2022-2023
Diversity Recruitment for Academic Programs, 2021-2023
BSI Committee, 2020-2021
President's Postdoctoral Fellowships Program Search Committee, 2020-2021
Co-organized the Data and Computational Social Science Seminar, 2015-2019
Faculty Search Committee, 2018-2019
Faculty Search Committee, 2016-2017
Faculty Leader for the Faculty & Staff Giving Campaign, 2016-2017

TEACHING EXPERIENCE

University of Michigan	2015 – Present
Network Analysis (SIADS 651)	
Models of Social Information Processing (SI 301/SI 315)	
Doctoral Seminar on Information Diffusion in Social Networks (SI 710)	
Data Exploration (SI 370)	
First Semester Experience (SI 705)	
Computational Social Science (CMPXSYS 250)	
Coursera	2017 – Present
Applied Social Network Analysis in Python	
Network Modeling and Analysis in Python	
Mathematics Department, Ithaca College, Lecturer	2011 – 2012
Calculus II	
Applied Calculus I	
Business Statistics	
Cornell Prison Education Program, Instructor	2009 – 2010
Classes: High School Algebra I and II	