

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
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

PUBLICATIONS

Notes:

* Author names are listed in alphabetical order.

Student and postdoc co-authors are underlined after 2015.

Journal Publications:

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.

H. Peng, Q. Ke, C. Budak, D.M. Romero, 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:

P. Vaghela, R.K. Mothilal, D.M. Romero, 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, 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, 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, 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, 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 AAAI 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 AAAI 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 AAAI 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 AAAI 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 AAAI 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

M.J. Brzozowski and D.M. Romero "Who Should I Follow? Recommending People in Directed Social Networks." Proc. 5th International AAAI 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 AAAI Conference on Weblogs and Social Media (ICWSM), 2010.

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 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. 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 2023.

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).

FELLOWSHIPS AND AWARDS

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).

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.

Ph.D. AND POSTDOC ADVISOR

Ed Platt (Ph.D. Candidate)

Danaja Maldeniya (Ph.D. Candidate)

Minje Choi (Ph.D. Candidate, co-advised with David Jurgens)

Aparna Ananthasubramaniam (Ph.D. Candidate, co-advised with David Jurgens)

Yulin Yu (Ph.D. Student)

David Gamba (Ph.D. Student, co-advised with Grant Schoenebeck)

Stacey Xiang (Ph.D. Student, co-advised with Misha Teplitskiy)

Dr. Hao Peng (Former Ph.D. Student, now Postdoctoral Fellow at Northwestern University)

Dr. Patrick Park (Former Michigan Data Science Fellow, now Assistant Professor at Carnegie Mellon University)

Dr. Tiago Cunha (Former Postdoctoral Fellow, now Research Fellow at University of Copenhagen)

DISSERTATION COMMITTEE MEMBER

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

Amanda Hardy (MS Student)

Eric Lian (Undergraduate Student)

Ziyang Ji (Undergraduate Student)

Xingyao Wang (Undergraduate Student)

Xingyu Lu (Undergraduate Student)

Herminio Bodon (REMS Program, next to Northwestern)

Yulin Yu (MS Student, next to University of Michigan)

Yin Yin (MS Student, next to Computer Packages Inc.)

Arushi Jain (MS Student, next to Microsoft)
Stella Seonghwa Choi (MS Student, next to Groundspeed Analytics)
Ruihan Wang (MS Student, next to Laboratory for Innovation Science at Harvard)
Muhan Yuan (MS Student, next to Analysis Group)
Arun Varghese (MS Student, next to Amazon)
Karthik Ramanathan (MS Student, next to World Bank Group)
Jiixin Ye (Undergraduate Student, next to University of Michigan)
Eric Blohm (Undergraduate Student, next to Jet.com)
Danielle Livneh (Undergraduate Student, next to Amazon)

INVITED SCHOLARLY PRESENTATIONS

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.

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.

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.

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

Michigan Interactive & Social Computing Seminar (MISC): Invited talk on “Online 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.

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.

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:

European Physical Journal (EPJ) Data Science (Associate Editor 2018 - present)
Applied Network Science (Editorial Board 2015 - present)

Program Committee Member:

WWW (The Web Conference), 2011-2013, 2015-2022

ICWSM (International Conference on Web and Social Media), 2013, 2016-2022

CSCW (Conference on Computer-Supported Cooperative Work and Social Computing), 2020 - 2022

WSDM (ACM's Web Search and Data Mining), 2018 – 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), Nature Human Behavior, Nature Computational Science, Network Science, Scientific Reports, PlosOne, CHI 2017, Physics Letters A, EPJ (European Physical Journal) Data Science, Data Mining and Knowledge Discovery, New Media & Society, CHI (Conference on Conference on Human Factors in Computing) 2013, Physica A, IEEE (Institute of Electrical and Electronics Engineers) Transactions on Network

Science and Engineering, Pervasive 2012, LANA Nonlinear Analysis: Modeling and Control, Information, 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 Review Panelist
Army Research Office (ARO) Reviewer

Organization of Research Workshops:

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

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.

University Level Service:

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-present

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

Interviewed MIDAS (Michigan Institute for Data Science) faculty candidates, 2016

Interviewed Complex Systems faculty candidates, 2016-2018

UMSI Service:

Dean's Advisory Committee, 2017-2018, 2022-2023

Diversity Recruitment for Academic Programs, 2021-present

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

Computational Social Science (LSA)

Network Analysis (UMSI)

Models of Social Information Processing (UMSI)

Doctoral Seminar on Information Diffusion in Social Networks (UMSI)

Data Exploration (UMSI)

Coursera 2017 – Present

Applied Social Network Analysis in Python

Mathematics Department, Ithaca College, Lecturer 2011 – 2012

Calculus II

Applied Calculus I

Business Statistics s

Cornell Prison Education Program, Instructor 2009 – 2010

Classes: High School Algebra I and II