Weiai (Wayne) Xu, Ph.D.

Associate Professor, Department of Communication
Core Faculty, Data Analytics and Computational Social Science
University of Massachusetts Amherst
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Academic Positions

- Associate Professor, Department of Communication, University of Massachusetts Amherst (Fall 2022–Present)
- Assistant Professor, Department of Communication, University of Massachusetts Amherst (Fall 2016–Fall 2022)
- Postdoctoral Teaching & Research Associate, Department of Communication Studies, Northeastern University (Fall 2015–Summer 2016)

Education

- Ph.D. in Communication, State University of New York at Buffalo, 2015
- MA in Media Studies, University of Wisconsin at Milwaukee. 2011
- BA in Public Administration, Zhejiang University of Technology of China, 2009

Peer-Reviewed Journal Articles

Wu, V. C. S., & **Xu, W. W.** (2024). Who leads and who echoes? Tracing message similarity network of# ClimateChange advocacy on Twitter. *Nonprofit and Voluntary Sector Quarterly*, *53*(2), 372-401.

Xu, W. W., Tshimula, J. M., Dubé, E., Graham, J. E., Greyson, D., MacDonald, N.E. & Meyer, S. B. (2022). Unmasking the Twitter Discourses on Masks During the COVID-19 Pandemic: User Cluster–Based BERT Topic Modeling Approach. *JMIR Infodemiology*, 2(2), e41198. doi: 10.2196/41198

Wang, R., & **Xu, W. W**. (2022). Hashtag framing and stakeholder targeting: An affordance perspective on China's digital public diplomacy campaign during COVID-19. *Journal of Information Technology & Politics*, *20*(3), 250-268.

Xu, W. W., & Wang, R. (2022). Nationalizing Truth: Digital Practices and Influences of State-Affiliated Media in a Time of Global Pandemic and Geopolitical Decoupling. *International Journal of Communication*. 16, 356–385.

Kwon, K. H., **Xu, W. W.**, & Wellman, B. (2021). The dark social web: Responsibility, manipulation, and participation in global digital spaces. *American Behavioral Scientist. 65*(5), 683-688.

Liu, W., **Xu, W. W,** & John, B. (2021). Organizational disaster communication ecology: Examining interagency coordination on social media during the onset of the COVID-19 pandemic. *American Behavioral Scientist. 65(7), 914-933.*

Xu, W. W., Sang, Y., & Kim, C. (2020). What drives hyper-partisan news sharing: exploring the role of source, style, and content. *Digital Journalism*, *8*(4), 486-505.

Xu, W. W. (2020). Mapping connective actions in the global Alt-Right and Antifa counterpublics. *International Journal of Communication, 14*, 22.

Liu, W., **Xu, W. W.**, & Tsai, J. Y. J. (2020). Developing a multi-level organization-public dialogic communication framework to assess social media-mediated disaster communication and engagement outcomes. *Public Relations Review*, *46*(4), 101949.

Xu, W. W., & Saxton, G. D. (2019). Does stakeholder engagement pay off on social media? A social capital perspective. *Nonprofit and Voluntary Sector Quarterly*, *48*(1), 28-49.

Liu, X., **Xu, W. W.**, & Li, B. (2019). Reason and passion in public discussion on Sina Weibo. *Telematics and Informatics*, *45*, 101285.

Liu, WL. & **Xu, W. W.** (2019). Tweeting to (selectively) engage: How government agencies target stakeholders on Twitter during Hurricane Harvey. *International Journal of Communication, 13,* 4917-4939.

Wang, H., **Xu, W. W.**, Saxton, G.D., & Singhal, A. (2019). Social media fandom for health promotion? Insights from East Los High, a transmedia edutainment initiative. *SEARCH Journal of Media and Communication Research*, *11*(1), 1-16.

Li, J., **Xu, W. W.**, Wang, F., Chen, S., & Sun, J. (2018). Examining China's internet policies through a bibliometric approach. *Journal of Contemporary Eastern Asia*, *17*(2), 237-253.

Liu, W., Lai, C. H., & **Xu, W. W.** (2018). Tweeting about emergency: A semantic network analysis of government organizations' social media messaging during hurricane Harvey. *Public Relations Review*, *44*(5), 807-819.

Xu, W. W., & Zhang, C. (2018). Sentiment, richness, authority, and relevance model of information sharing during social Crises—the case of# MH370 tweets. *Computers in Human Behavior*, *89*, 199-206.

Welles, B. F., & **Xu, W. W.** (2018). Network visualization and problem-solving support: A cognitive fit study, *Social Networks*, *54*, 162-167.

Liu, X. C. & **Xu, W. W.** (2018). Adoption of ride-sharing apps by Chinese taxi drivers and

its implication for the equality and wellbeing in the sharing economy. *Chinese Journal of Communication*, *12*(1), 7-24.

Vishwanath, A., **Xu, W. W**, & Ngoh, Z. (2018), How people protect their privacy on facebook: A cost-benefit view. *Journal of the Association for Information Science and Technology*, *69*(5), 700-709.

Xu, W. W., Park, J. Y., & Park, H. W. (2017). Longitudinal dynamics of the cultural diffusion of Kpop on YouTube. *Quality & Quantity*, *51*(4), 1859-h1875.

Xu, W. W., & Park, H. W. (2017). Versatile networks in combining qualitative and quantitative data. *Quality & Quantity*, *51*(3), 959-961.

Lee, J., & **Xu, W. W.** (2017). The more attacks, the more retweets: Trump's and Clinton's agenda setting on Twitter. *Public Relations Review*, *44*(2), 201-213.

Barnett, G. A., Ruiz, J. B., **Xu, W. W.,** Park, J. Y., & Park, H. W. (2017). The world is not flat: Evaluating the inequality in global information gatekeeping through website co-mentions. *Technological Forecasting and Social Change*, *117*, 38-45.

Barnett, G. A., **Xu, W. W.,** Chu, J., Jiang, K., Huh, C., Park, J. Y., & Park, H. W. (2017). Measuring international relations in social media conversations. *Government Information Quarterly*, *34*(1), 37-44.

Xu, W. W., Park, J. Y., Kim, J. Y., & Park, H. W. (2016). Networked cultural diffusion and creation on YouTube: an analysis of YouTube memes. *Journal of Broadcasting & Electronic Media*, *60*(1), 104-122.

Kwon, K. H., **Xu, W. W.,** Wang, H., & Chon, J (2016). Spatiotemporal diffusion modeling of global mobilization in social media: The case of the 2011 Egyptian revolution. *International Journal of Communication*, *10*(1), 73-97.

Lee, K. S., Sang, Y., & **Xu, W. W.** (2015). The shaping of the network neutrality debate: Information subsidizers on Twitter. *International Journal of Communication*, *9*, 1544-1562.

Xu, W. W., & Feng, M. (2015). Networked creativity on the censored Web 2.0: Chinese users' Twitter-based activities on the issue of internet censorship. *Journal of Contemporary Eastern Asia*, *14*(1), 23-43.

Xu, W. W., Park, J. Y., & Park, H. W. (2015). The networked cultural diffusion of Korean Wave. *Online Information Review*, *39*(1), 40-60.

Xu, W. W., Chiu, I., Chen, Y., & Mukherjee, T. (2014). Twitter hashtags for health - Applying network and content analyses to understand health knowledge sharing in a Twitter-based community of practice. *Quality & Quantity, 49*(4), 1361-1380.

Xu, W. W., Sang, Y.M., Blasiola, S., & Park, H.W. (2014). Predicting opinion leaders in Twitter activism networks: The case of the Wisconsin recall election. *American Behavioral Scientist, 58*(10), 1278-93.

Xu, W. W. & Feng, M. (2014). Talking to the broadcasters on Twitter - Networked gatekeeping in Twitter conversations with journalists. *Journal of Broadcasting & Electronic Media, 58*(3), 420-37.

Xu, W. W., Li, L., Stefanone, M. A., & Fu, R. (2014). Does social media users' commenting behavior differ by their local community tie? A computer–assisted linguistic analysis approach. *First Monday, 19*(1). doi: 10.5210/fm.v19i1.4821

Xu, W. W., Stefanone, M. A., & Rui, J. R. (2013). The benefits and burdens of network diversity: Political engagement on social networking sites. *First Monday, 18*(2). doi:10.5210/fm.v18i9.4822

Peer-Reviewed Conference Proceedings

Kwon, K. H., Wang, H., Raymond, R., & **Xu, W. W.** (2015, July). A spatiotemporal model of Twitter information diffusion: an example of the Egyptian revolution 2011. In *Proceedings of the 2015 International Conference on Social Media & Society* (p. 4). ACM.

Stefanone, M. A., Saxton, G. D., Egnoto, M., **Xu, W. W.,** & Fu, R. (2015). Image attributes and diffusion via Twitter: The case of #guncontrol. *Proceedings of the 47 Annual Hawaii International Conference on Systems Science* (HICSS), pp. 1566-1575. January 6-9, Big Island.

Book Chapters

Blasiola, S., Sang, Y.M., & **Xu, W. W.** (2015). More than words: Technical activist actions in #CISPA. In N. Rambukkana (Ed.), *Hashtag publics: The power and politics of discursive networks* (pp. 255–265). New York, NY: Peter Lang.

Conference Presentations

Xu, W. W. (2021, May). *Automated Nationalism? Quantifying authenticity, influence, and identities in coordination networks for digital diplomacy*. Paper presented at the 2021 International Communication Association Annual Conference (Remote).

Xu, W. W. (2020, May). *What drives hyper-partisan news sharing: Exploring the role of source, style, and content*. Paper presented at the 2020 International Communication Association Annual Conference (Remote).

Wang, J., Li, H., **Xu, W. W**., & Xu, W. (2019, September). *Imagining a credit society: Discourses of the social credit system in Chinese media*. Poster presented at the Boston University Fall Symposium - Preserving individual freedom in an age of socio-technical control via algorithmic rewards, Boston, MA.

Xu, W. W. (2019, May). *Mapping the identities and engagement in the Alt-Right and Antifa counterpublics: A social and semantic network approach.* Paper presented at the 2019 International Communication Association Annual Conference, Washington D.C.

Xu, W. W., & Lee, J. (2018, August). *Winning through words? A computational linguistic study of presidential candidates' language styles on social media in the age of populism.* Poster presented at AEJMC, Washington D.C.

Xu, W. W., & Liu, WL. (2018, August). *Tweeting to (selectively) engage: A network analysis of government organizations' stakeholder management on Twitter during Hurricane Harvey.* Paper presented at AEJMC, Washington D.C. **(Best Paper Award)**

Xu, W. W., & Zhang, C. (2018, May). *Sentiment, richness, authority, and relevance model of information sharing during social crises-the case of #MH370 tweets.* Paper presented at the 2018 International Communication Association Annual Conference, Prague, Czech Republic.

Xu, W. W., Liu, WL. (2018, May). *Stakeholder-targeting and networked relationship building on social media during natural disasters.* Paper presented at the ICA Embracing the Network Paradigm Pre-Conference, Prague, Czech.

Liu, WL., Lai, C.H., **Xu, W. W**. (2018, May). *Tweeting about emergency: A semantic network analysis of government organizations' social media messaging during Hurricane Harvey.* Paper presented at the 2018 International Communication Association Annual Conference, Prague, Czech.

Wu, C.S., & **Xu, W. W**. (2018, March). *Disadvantaged communities, Unchained leadership? Community foundations' strategic use of social media for social change.* Paper presented at the 2018 American Society for Public Administration Annual Conference, Denver, Colorado.

Wu, C.S., & **Xu, W. W**. (2017, November). *The place dilemma of community foundations: "Equalizing" the inequality?* Paper presented at the annual conference of the Association for Research on Nonprofit Organizations and Voluntary Action, Grand Rapids, Michigan. **(Best Paper Award)**

Xu, W. W., Saxton, G., & Guo, C. (2016, November). *Predicting returns from social media capital in nonprofits' online stakeholder targeting.* Paper presented at the annual conference of the Association for Research on Nonprofit Organizations and Voluntary Action, Washington D.C.

Wu, C.S., & **Xu, W. W**. (2016, November). *Collective action framing by rival advocacy groups in Hong Kong Occupy Central Movement.* Paper presented at the annual conference of the Association for Research on Nonprofit Organizations and Voluntary Action, Washington D.C.

Xu, W. W., Saxton, G., & Guo, C. (2015, November). *Social media-based stakeholder-targeting and its effect on social capital.* Paper presented at the annual conference of the Association for Research on Nonprofit Organizations and Voluntary Action, Chicago, IL.

Xu, W. W., Ngoh, Z., & Vishwanath, A. (2015). *Enabling protection motivation in heuristic-systematic defense against email phishing.* Paper presented at the Communication and Technology Division of the 2015 International Communication Association Annual Conference, San Juan, Puerto Rico. **(Best Paper Award)**

Vishwanath, A., Ngoh, Z., & **Xu, W. W.** (2015). *Predicting privacy protection behavior on social networking sites.* Paper presented at the Communication and Technology Division of the 2015 International Communication Association Annual Conference, San Juan, Puerto Rico.

Egnoto, M. J., **Xu, W. W.,** Saxton, G., & Stefanone, M., A. (2014, November). *What makes an image worth a thousand words? A content analysis of #guncontrol – related image characteristics that predict sharing behavior.* Paper presented at the Human Communication and Technology Division of the 100th Annual National Communication Association Conference, Chicago, IL.

Xu, W. W. & Feng, M. (2014). *The networked creativity in the censored Web 2.0.* Paper presented at the 2014 Daegu Gyeongbuk International Social Network Conference (DISC). Daegu, South Korea. **(Best Paper Award)**

Feng, M. & **Xu, W. W.** (2014). *Knowledge sharing in and out of the networked authoritarianism.* Paper presented at the 2014 Daegu Gyeongbuk International Social Network Conference (DISC). Daegu, South Korea.

Wang, H., **Xu, W. W.,** & Saxton, G. (2014). *Cultivating a fan base on Facebook for public health promotion: The case of East Los High.* Paper presented at the Medicine 2.0 Social Media, Mobile Apps, and Internet/Web 2.0 in Health, Medicine and Biomedical Research 2014. Maui, Hawaii.

Wang, H., **Xu, W. W.,** & Saxton, G. (2014). *Network structures for a better Twitter community.* Paper presented at Social Media & Society Conference. Toronto, Canada.

Park, J.Y., Kim, J.Y., **Xu, W. W.,** & Park, H.W. (2014). *A social network framework to analyze the cultural contents of Kpop across countries.* Paper presented at the first European Social Networks Conference. Barcelona, Spain.

Xu, W. W. & Hamilton, A. (2013). *Social media targeting of healthcare experts for knowledge acquisition – An evaluative framework integrating network and content analyses.* Abstract presented at the 2013 Daegu Gyeongbuk International Social Network Conference (DISC). Daegu, South Korea.

Xu, W. W. (2013). *Integrating network and content analyses to evaluate healthcare knowledge sharing in Twitter communities.* Abstract presented at the 2013 Daegu Gyeongbuk International Social Network Conference (DISC). Daegu, South Korea.

Stefanone, M.A & **Xu, W. W**. (2013, October). *Does social media users' commenting behavior differ by their local community tie? A computer-assisted linguistic analysis approach.* Paper presented at the 2013 71st annual New York State Communication Association Convention. Ellenville, New York.

Xu, W. W., Stefanone, M.A., & Rui, J. (2013). *The benefits and burdens of network diversity: political engagement on social networking sites.* Paper presented at the annual conference of the International Communication Association (ICA), London, England.

Xu, W. W., Sang, Y.M., & Blasiola, S. (2013). *Predicting opinion leaders in Twitter activism networks: The case of the Wisconsin recall election.* Paper presented at the annual conference of the International Communication Association (ICA), London, England. **(Best Paper Award)**

Egnoto, M.J., **Xu, W. W,** & Stefanone, M.A., (2013, November). *A quantitative look at the quintessential components of compliance gaining.* Paper presented at the 2013 annual convention of the National Communication Association. Washington, D.C.

Yang, Z. J., Dudo, A., Kahlor, L., Liang, M. Allen Catellier, J. **Xu, W. W**., & Mertel, J. (2012). *The climate change blame game: U.S. elite newspaper coverage of climate change.* Paper presented at the annual conference of the Association for Education in Journalism and Mass Communication (AEJMC), Chicago, IL.

Xu, W. (2011). *The behavior of internet censorship in China.* Paper presented at the 2011 annual conference of the International Communication Association (ICA), Boston, MA.

Xu, W. & Feng, M. (2011). *Exotic disease or local disease? An analysis of H1N1 swine flu coverage on Chinese media.* Paper accepted at the Questioning Transnationalism: Culture, Politics & Media Conference, Royal Holloway, London, England.

Grants

- Co-PI, Global Democracy Frontliners: Transnational Research Coalition for Tech Accountability and Democratic Innovations Centering Communities in the Margins, funded by Luminate and Reset, $420,000 (2022-2023).
- Senior Personnel, FACT CHAMP Phrase Two - Fact-checker, Academic, and Community Collaboration Tools: Combating Hate, Abuse, and Misinformation with Minority-led Partnerships, the National Science Foundation's Convergence Accelerator Grant, $560,000 (2022-present).
- Senior Personnel, FACT CHAMP Phrase One - Fact-checker, Academic, and Community Collaboration Tools: Combating Hate, Abuse, and Misinformation with

Minority-led Partnerships, the National Science Foundation's Convergence Accelerator Grant, $750,000 (2021-2022).

- Principal Investigator, Cutting through the noise: the spread of public health messages amidst politicized epidemics? University of Massachusetts Amherst College of Social and Behavioral Sciences (SBS) Research Support Grants (internal), Co-investigator: Justin Gross (Political Science, UMass-Amherst), $5,595 (2020-201).
- Co-investigator, Sociocultural factors affecting communities' response to countermeasures for COVID-19 epidemic, Canadian Institutes of Health Research, Principal investigator: Ève Dubé (Public Health, Quebec National Institute of Public Health, CHU Research Center and Laval University) $25,000 (dedicated to my research team) (2020-2021).
- Principal Investigator, *Mapping China's Public Diplomacy Operations on Twitter during the COVID-19 Crisis,* NSF-funded Natural Hazard Center, $1,000 (2020).
- Principal Investigator*, Networked Engagement in a Censored Web*, supported by global media law and policy from the Center for Global Communication Studies (CGCS) at the Annenberg School for Communication at the University of Pennsylvania, $2,000 (2015).

Awards

- Institute for Social Science Research (ISSR) Scholar for 2021-22
- UMass Spring 2020 Open Education Award
- Best Reviewer Award, the Association for Research on Nonprofit Organizations and Voluntary Action (2022)
- Best Paper Award, the Association for Research on Nonprofit Organizations and Voluntary Action (2017)
- Best Paper Award, Association for Education in Journalism and Mass Communication (2018)
- Top Student Paper Award from the Communication and Technology Division of International Communication Association (2013, 2015)
- IMC Award by Asia Triple Helix Society (2014)
- Chancellor Award of University of Wisconsin - Milwaukee (2010-2011, 2009-2010)
- Kordus Award of University of Wisconsin - Milwaukee (2011)
- Graduate Student Travel Award of University of Wisconsin – Milwaukee 2010

Invited Research Talks

- Speaker at the 2021 Myongji CFPS International Online Conference

- Speaker at the 2021 Graduate Conference in Hong Kong Baptist University

- The Weatherhead Research Cluster on International Security's Pilot Workshop (11/17/2018, Harvard University)

- *Using Computational Methods to Detect Framing Differences Between Rivalry Advocacy Groups during Social Movements – The Case of Hong Kong's Occupy Central Protest* – Computational Social Science Institute Lunch Seminar (4/7/2017, UMass-Amherst)

- Panelist on ISSR Panel: "Social Science Research for Social Media" (10/26/2017, UMass-Amherst)

Previous Involvement in National Grant Projects as Research Assistant

- Network Science Institute, Northeastern University, US Army Research Office grant (W911NF-14-1-0672) and US Army Research grant (W911NF-09-2-0053) (2015-2016)

- SUNY-Buffalo, the Air Force Office of Scientific Research (AFOSR) supported project *Socio-Cultural Media Sharing as Conversations: Sensing and Modeling Behavior in Response to Environmental Changes* (2012-2013)

- SUNY-Buffalo, The program evaluation for TV show *East Los High*, supported by The Population Media Center (2013-2015)

- SUNY-Buffalo, The *Integrating Social and Systems Science Approaches to Improve Oral Health Equity* project supported by NIDCR and OBSSR (2014-2015)

External advisory board

- CyberWorldInsight (www.cyberworldinsight.com): A Pakistan-based nonprofit focusing on tech and justice
- Mediatiz Institute (www.mediatizinstitute.com): A Pakistan-based nonprofit focusing on media literacy

Teaching

Department of Communication, University of Massachusetts – Amherst

- *COMM622: Quantitative Research Methods (Graduate Seminar)*
- *COM487DB: Survey/Digital Behavioral Data (now COMM 401)*
- *COM397SM: Social Media & Internet Communities*
- *COMM797: Networks in Digital Infrastructure*
- *COMM122: Introduction to Media Industries*

MS in Data Analytics & Computational Social Science

- *DACSS697DB: Survey/Digital Behavioral Data (now DACSS631)*

Guest Lectures:

- *COMM101*
- *COMM621, Network Analysis, Spring 2017*
- *COMM797F Content Analysis, Content analysis using computers and algorithms, Spring 2017*

Department of Communication Studies, Northeastern University

- *Quantitative Research Methods*

Department of Communication, State University of New York at Buffalo

Lecture instructor

- *COM240: Survey of Mass Communication*
- *COM101: Principles of Communication*

Teaching Assistant

- *COM240: Survey of Mass Communication*
- *COM631: Graduate Statistics*
- *COM225: Interpersonal Communication*
- *COM101: Principles of Communication*

Department of Journalism, Advertising and Media Studies, University of Wisconsin at Milwaukee

Teaching Assistant

- *JMC 242: Advertising in American Society*

Service to the Field

Editorial leadership:

- Associate Editor of *Quality & Quantity* (SSCI-indexed) (2019-present)
- Associate Editor of *Frontiers in Research Metrics & Analytics* (2023-present)
- Managing Editor of *Journal of Contemporary East Asia* (JCEA) (2016-present)
- Member of the editorial board of *Social Media + Society* (2015-present)
- Member of the editorial board of *Journalism Studies* (2020-present)
- Member of the editorial board of *Nonprofit and Voluntary Sector Quarterly* (2022-present)
- Managing Guest Editor of the special issue entitled *Open (Big) Data as Social Change: Triple Helix Innovation toward Government 3.0* on *Technological Forecasting and Social Change* (2015)

- Editor of *American Behavioral Scientist*'s Special Issue "The Dark Social Web: Responsibility, Manipulation, and Participation in Global Digital Spaces" (2020)
- Chief Social Media Officer, Computational Methods Division of ICA (2020-present)

Manuscript reviewer for:

- *New Media & Society*
- *Journal of Communication*
- *International Journal of Communication*
- *International Journal of Press/Politics*
- *Social Media + Society*
- *Journal of Computational Social Science*
- *Journal of Interactive Advertising*
- *Journal of Public and Nonprofit Affairs*
- *Journal of the Association for Information Science and Technology*
- *Journalism Studies*
- *Media Culture and Society*
- *Nature Human Behaviour*
- *Nonprofit and Voluntary Sector Quarterly*
- *Nonprofit Management and Leadership*
- *Online Information Review*
- *Place Branding and Public Diplomacy*
- *Quality & Quantity*
- *Telematics and Informatics*

Book reviewer for:

- *Mastering Social Media Mining with Python*

Reviewer for academic conferences:

- *International Communication Association*
- *International Conference on Computational Social Science*
- *The Annual Hawaii International Conference on Systems Science* (HICSS)

Service to the University

- Governance Board Member, Master Program in Data Analytics and Computational Social Science, UMass Amherst (2019-present)
- Steering Committee, the Computational Social Science Institute (CSSI), UMass Amherst (2017-present)
- Steering Committee, Public Interest Technology (PIT), UMass Amherst (upcoming)
- Graduate Studies Committee, Department of Communication, UMass Amherst (spring 2019-present)
- Research and Intellectual Life Committee, Department of Communication, UMass Amherst (spring 2017-2019)

Skills
R, Python, Gephi

Languages
English, Mandarin Chinese, Cantonese, Wu Chinese