

Call for Papers

JASIST Special Issue “Healthier Information Ecosystems”

Submissions due: May 1, 2023 Deadline Extended to May 15

Call for Papers

This special issue, “Healthier Information Ecosystems,” will focus on the interconnected nature of online pathologies, draw attention to the socio-technical aspects of information technology, and animate interdisciplinary approaches to addressing these problems. Similar to Buckminster Fuller’s mission of “World Game,” we want to aid in developing a wide variety of solutions (including but not limited to technical, political, social, and educational) to the wicked problems of our time to make “the world work for 100% of humanity, in the shortest period of time... without ecological offense or the disadvantage of anyone.”

We invite contributions that address the socio-cultural embeddedness of the problems plaguing information ecosystems and provide new ways of thinking about and strategies to achieve a healthier global information environment. We are actively seeking a broad approach to issues of healthier information ecosystems, including both theoretical and applied, qualitative and quantitative, as well as inside and outside the discipline of information science and technology. We are interested in transdisciplinary contributions that move beyond narrow, cross-sectional treatments of online phenomena to highlight the socio-technical dynamics of online spaces framed in cultural-historical contexts.

As Rong Tang (Tang et al., 2021) and colleagues mentioned in their 2021 *JASIST* piece, information science is experiencing a paradigm shift and the need to better understand the socio-technical side of information technology is central to this change.

Motivation

There is no shortage of research examining the pathological aspects of our modern information ecosystems, covering a broad spectrum of socio-technical phenomena including (but not limited to) misinformation, toxicity, polarization, and extremism. Together, these phenomena might be considered to be a sign of an “unhealthy” information ecosystem. However, our collective understanding of the problem remains fragmented and incomplete, impeding our ability to identify and implement successful solutions. For this special issue, we seek papers that take an interdisciplinary approach to expanding our understanding of information ecosystems by answering such vital questions as: What does it mean to live in an unhealthy information ecosystem, is it possible to envision a healthier one, and how do we get from here to there?

While many of the problems in online settings have been examined in isolation, they are often intimately connected—each problem can be both cause and consequence of the others. For instance, toxic online content is made even more virulent by bogus claims and misinformation that is amplified by social media’s and search engines’ network infrastructure (e.g., Benkler et al., 2018; Chen et al., 2021; Donovan, 2020; Freelon & Lokot, 2020; Freelon & Wells, 2020; Haider & Sundin, 2019, 2022; Nisbet et al., 2021; Ognyanova et al., 2020; Tripodi, 2021; Uyheng

& Carley, 2020). Misinformation (and disinformation) can inflame conspiracy theories that demonize outgroups and reinforce social identity dynamics, driving further polarization (Ribeiro et al., 2017; Vicario et al., 2019) and paving the way for toxic online cultures (Judson, et al., 2020; Kim et al., 2021; Pascual-Ferrá et al., 2021; Thomas et al., 2021).

We adopt an ecosystems framing to highlight such interconnectedness. The problems that now occupy many researchers' work emerge from complex, technologically mediated networks and interconnected systems of people, institutions, and cultures that create, spread, organize, and amplify information. This complex system is a rich avenue for inquiry by the research community, but focusing on isolated aspects while neglecting their interrelationships will miss systemic opportunities to intervene. Moreover, problems like misinformation, toxicity, and polarization are influenced by contextual factors including social norms, economics, power structures, and worldviews. If we fail to examine information science and technology against this backdrop, stakeholders inside and outside of the academy are unlikely to identify realistic strategies for improving information ecosystems.

Themes to Consider

We are open to a wide variety of methodologies, including empirical, theoretical, and applied. We are also open to contributions that propose new approaches to exploring these issues and/or solutions from an interconnected information ecosystem perspective, but such papers should clearly explain how the proposed approaches will contribute to substantive solutions. Topics of interest include, but are not limited to:

Definitions of healthy ecosystems

- Ethical models for evaluating the health of online information ecosystems
- Multilevel metrics for evaluating the health of online information ecosystems

Strategies for creating healthy ecosystems

- Design and collective human dynamics
- Disrupting systems of mis- and dis-information in politics and democracy, including national, state, and local politics.
- Educational interventions

Connecting information to other disciplines

- Information as a social, political, economic, and cultural phenomenon
- Interdisciplinary perspectives and approaches to information and media
- The role of information ecosystems in conspiracy theories
- Interactions between online and offline decision making and behavior
- Information architecture, interface design and psychological biases of information consumers
- Engaging with systems of power; who is advantaged and who is disadvantaged from current or future systems

New methods of theory, research, and application of information ecosystems

- Complex dynamics of information, social interaction and cognition
- Social dynamics and digital media ecosystems
- How policy, economic, and market forces shape algorithm design and development
- Big data, open science, and their socio-cultural impacts
- Hijacking of user-generated content and / or AI-generated content
- Mis- and dis-information transference during the COVID 19 pandemic

Papers should speak to the information science community, but do so in an interdisciplinary manner that centers on the interplay of information, technology, and society. We are eager to receive contributions from disciplines that might lend new perspectives, including (but not limited to) statistical physics, complex systems, biology, environmental science, economics, management science, organization science, communication, psychology, anthropology, sociology, and philosophy. All contributions should clarify how they can be used to help our information ecosystems work for the betterment of society at large, developing an inclusive and thus “healthy” ecosystem.

Introduction to Guest Editors

We are a team of scholars from information science, computer science, communication, and sociology looking for paper contributions that tackle these important questions. Much work has highlighted the pressing problems of mis/dis/mal information and the impact it has on public health, equality, and democracy. Now we are looking for submissions that emphasize solutions.

Josh Introne is an Assistant Professor in the School of Information Studies at Syracuse University, USA, and director of the C4-Lab, which focuses on research at the intersection of complexity, cognition, communication, and computation. He studies the dynamics of misinformation and has partnered with industry and non-profit agencies to develop technology solutions for marginalized populations. jeintron@syr.edu

Charisse L’Pree Corsbie-Massay is an Associate Professor of Communications at the Newhouse School of Public Communications at Syracuse University, USA. Trained in social psychology and critical media studies, Charisse investigates how users think about themselves and others via media. clcorsbi@syr.edu

Brian McKernan is a Research Assistant Professor in the School of Information Studies at Syracuse University, USA, and an expert in human-centered design, complex human reasoning, conspiracies and misinformation, the study of the cultures of online communities, and game studies. Brian conducts research and contributes to the development of tools to help monitor strategic communication by U.S. political actors on social media. bmckerna@syr.edu

Deana Rohlinger is a Professor of Sociology, a Director of Research for the Institute of Politics, and an Associated Dean in the College of Social Sciences and Public Policy at Florida State University, USA. Deana’s current research explores incivility, polarization, and extremism in individual claims around political controversies, including Supreme Court hearings and school shootings. drohling@fsu.edu

Olof Sundin is a professor of information studies at Lund University, Sweden. He has extensive experience in researching the configuration of information in contemporary society, the construction of trustworthiness, and media and information literacy practises in schools and everyday life. He is co-author of *Paradoxes of Media and Information Literacy: The Crisis of Information* (Routledge, 2022).

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Francesa Tripodi is an Assistant Professor at the School of Information and Library Science (SILS) and a Senior Research at the Center for Information Technology and Public Life at UNC-Chapel Hill, USA. Her research examines the relationship between social media, political partisanship, and digital inequality; she is currently studying the cultural complexities of search literacy and misinformation. ftripodi@email.unc.edu

Submission Guidelines

Submit your manuscript through your JASIST author account at

<https://mc.manuscriptcentral.com/jasist>. Submissions should comply with JASIST criteria for a 'Research Article' and be at most 7000 words in length.

<https://asistdl.onlinelibrary.wiley.com/hub/journal/23301643/homepage/forauthors>

For additional information, please see [this PDF](#) of the Paper Development Workshop, held February 3, 2023.

Special Issue Timeline (subject to change)

- Submissions due: ~~May 1, 2023~~ **Deadline Extended to May 15**
- Decisions after first round of reviews: August 1, 2023
- Special Issue to be published in January 2024

Criteria for Acceptance

Peer reviewers will be asked to evaluate papers following JASIST guidelines (which are described here:

<https://asistdl.onlinelibrary.wiley.com/hub/journal/23301643/homepage/forauthors>

For inclusion in the special issue reviewers will also be asked to judge the strength of a submission in three ways:

1. Does the submission draw on multiple disciplinary perspectives?
2. Does the submission address questions pertaining to the systemic aspects of information ecosystems?
3. Does the submission clarify how it informs strategies to achieve healthier information ecosystems?

References

Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, 31(2), 211–236. <https://doi.org/10.1257/jep.31.2.211>.

Barberá, P. (2020). Social media, echo chambers, and political polarization. In N. Persily & J. A. Tucker (Eds.), *Social media and democracy: The state of the field, prospects for reform*

- (pp.34-56). Cambridge University Press.
- Benkler, Y., Faris, R., & Roberts, H. (2018). *Network propaganda: Manipulation, disinformation, and radicalization in American politics*. New York: Oxford University Press.
- Boxell, L., Gentzkow, M., & Shapiro, J.M. (2017). Greater Internet use is not associated with faster growth in political polarization among US demographic groups. *Proceedings of the National Academy of Sciences*, 114(40), 10612–10617.
- Chen, E., Chang, H., Rao, A., Lerman, K., Cowan, G., & Ferrara, E. (2021). "COVID-19 misinformation and the 2020 US presidential election. *The Harvard Kennedy School Misinformation Review*, 1(7). <https://doi.org/10.37016/mr-2020-57>
- Donovan, J. (2020). Concrete recommendations for cutting through misinformation during the COVID-19 pandemic. *American Journal of Public Health*, 110(S3), S286–S287. <https://doi.org/10.2105/AJPH.2020.305922>
- Freelon, D., & Lokot, T. (2020). Russian Twitter disinformation campaigns reach across the American political spectrum. *The Harvard Kennedy School Misinformation Review*, 1(1). <https://doi.org/10.37016/mr-2020-003>
- Freelon, D., & Wells, C. (2020). Disinformation as political communication. *Political Communication*, 37(2), 145–156. <https://doi.org/10.1080/10584609.2020.1723755>
- Haider, J. & Sundin, O. (2019). *Invisible search and online search engines: The ubiquity of search in everyday life*. Routledge.
- Haider, J. & Sundin, O. (2022). *Paradoxes of media and information literacy: The crisis of information*. Routledge.
- Judson, E., Atay, A., Krasodonski-Jones, A., Lasko-Skinner, R., & Smith, J. (2020). Engendering hate: The contours of state-aligned gendered disinformation online. *DEMOS*. <https://dera.ioe.ac.uk//36786/1/Engendering-Hate-Report-FINAL.pdf>
- Kim, J. W., Guess, A., Nyhan, B., & Reifler, J. (2021). The distorting prism of social media: How self-selection and exposure to incivility fuel online comment toxicity. *Journal of Communication*, 71(6), 922–946. <https://doi.org/10.1093/joc/jgab034>
- Nisbet, E.C., Mortenson, C., Li, Q. (2021). The presumed influence of election misinformation on others reduces our own satisfaction with democracy. *The Harvard Kennedy School Misinformation Review*, 1(7). <https://doi.org/10.37016/mr-2020-59>
- Ognyanova, K., Lazer, D., Robertson, R. E., & Wilson, C. (2020). Misinformation in action: Fake news exposure is linked to lower trust in media, higher trust in government when your side is in power. *The Harvard Kennedy School Misinformation Review*, 1(4). <https://doi.org/10.37016/mr-2020-024>
- Pascual-Ferrá, P., Alperstein, N., Barnett, D. J., & Rimal, R. N. (2021). Toxicity and verbal aggression on social media: Polarized discourse on wearing face masks during the COVID-19 pandemic. *Big Data & Society*, 8(1), 1-17. <https://doi.org/10.1177/20539517211023533>
- Ribeiro, M. H., Calais, P. H., Almeida, V. A. F., & Meira Jr, W. (2017). Everything I disagree with is #FakeNews”: Correlating political polarization and spread of misinformation. *Proceedings of DATA SCIENCE + Journalism @KDD 2017, Canada*, 1-8. DOI:10.475/123_4
- Tang, R., Mehra, B., Du, J. T., & Zhao, Y. (2021). Framing a discussion on paradigm shift (s) in the field of information. *Journal of the Association for Information Science and Technology*, 72(2), 253-258. <https://doi.org/10.1002/asi.24404>

- Thomas, K., Akhawe, D., Bailey, M., Boneh, D., Bursztein, E., Consolvo, S., Dell, N., Durumeric, Z., Kelley, P. G., Kumar, D., McCoy, D., Meiklejohn, S., Ristenpart, T., & Stringhini, G. (2021). SoK: Hate, harassment, and the changing landscape of online abuse. *2021 IEEE Symposium on Security and Privacy (SP), USA*, 247–267. <https://doi.org/10.1109/SP40001.2021.00028>
- Tripodi, F. (2021). Ms. Categorized: Gender, notability, and inequality on Wikipedia. *New Media & Society*, 14614448211023772. <https://doi.org/10.1177/14614448211023772>
- Uyheng, J., & Carley, K. M. (2020). Bots and online hate during the COVID-19 pandemic: Case studies in the United States and the Philippines. *Journal of Computational Social Science*, 3(2), 445–468. <https://doi.org/10.1007/s42001-020-00087-4>
- Vicario, M. D., Quattrociocchi, W., Scala, A., & Zollo, F. (2019). Polarization and fake news: Early warning of potential misinformation targets. *ACM Transactions on the Web*, 13(2), 1-22. <https://doi.org/10.1145/3316809>