

Yong-Yeol Ahn

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INFORMATION School of Data Science, University of Virginia
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HIGHLIGHTS Selected Honors and Grants

- PI, AFOSR MURI (\$7.5M), 2025
- IU Trustees' Teaching Award, 2023
- NVIDIA hardware grant, 2022
- Test of Time Award, ACM IMC, 2022 [A99]
- PI, AFOSR MINERVA (\$4.4M), 2019
- Kavli Fellow, 2015
- LinkedIn Economic Graph Challenge winner, 2015
- [Microsoft Research Faculty Fellowship, 2014](#)
- AKPA Outstanding Young Researcher Award, 2012

Network Science and Machine Learning

- Networks and Machine Learning: *Nature*, 2010 [A92]; *JMLR*, 2017 [A58]; *Nat. Phys.*, 2021 [A32]; *Sci. Adv.*, 2021 [A38]; *Nat. Comm.*, 2021 [A30]; *NeurIPS*, 2021 [A33]; *PNAS*, 2023 [A18]; *Nat. Comm.*, 2024 [A11]; *ICML*, 2025 [A1]
- Natural Language Processing: *ACL*, 2018 [A56]; *EMNLP*, 2021 [A27]

Computational Social Science

- Science of Science: *Lancet*, 2019 [A54]; *Nat. Hum. Behav.*, 2022 [A23]; *Sci. Adv.*, 2021 [A38]; *PNAS*, 2023 [A18]
- Beliefs and spreading phenomena: *Sci. Rep.*, 2013 [A84] and *ICWSM'14* [A81]; *PRL*, 2014 [C3] (featured in Editors' suggestion); "Complex Spreading Phenomena in Social Systems" Eds. Springer, 2018 [B2]; *Nat. Phys.*, 2021 [A32]; *Sci. Adv.*, 2024 [A9]; *Nat. Hum. Behav.*, 2025 [A7]
- Economy, mobility, and migration: *Science*, 2014 [A80]; *Nat. Comm.*, 2019 [A53]; *PNAS*, 2023 [A18]; *arXiv*, 2025 [P10]
- Public Health: *Nat. Phys.*, 2021 [A32]; *PNAS*, 2020 [A42]; *JAMA Network Open*, 2021 [A36, A35, A40]; *JMIR Human Factors*, 2021 [A29]
- Online social media: *IMC'07* [A99] (Best paper and Test of Time Award); *WWW'07* [A98]; *IMC'08* [A96]; [The Pulse of the Nation](#); *ICWSM'11* [A90]
- Gender: *ICWSM'16* [A68] *ICWSM'17* [A64]; *Lancet*, 2019 [A54]

Computational Biology and Neuroscience

- Cellular Networks: *Science*, 2011 [A89].
- Drug discovery: *PNAS*, 2010 [A94].
- Neuroscience: *PLoS Comp. Biol.*, 2011 [A91]; *Neuron*, 2015 [A73]; *Net Neurosci.*, 2019 [A55]

Cultural Science

- Computational gastronomy: *Sci. Rep.*, 2011 [A88] (the most downloaded paper in all *Nature* journals in Dec. 2011; covered by *Nature News*, *Scientific American*, etc.); *PLOS ONE*, 2013 [A86] (covered by *Wired* and MIT tech review)
- Computational history: *Science*, 2014 [A80] (a [video produce by Nature](#) with more than one million views; [NSF Vizzies challenge finalist](#)).
- Music and art: *R. Soc. Open Sci*, 2017 [A60]; *ISMIR'19* [A49]; *ICWSM* [A19]; *Sci. Rep.* [A12]; *Humanit. Soc. Sci. Commun.*, 2025 [A6]

ACADEMIC POSITIONS	University of Virginia , Charlottesville, VA, USA	
	Quantitative Foundation Distinguished Professor, School of Data Science	August 2025–
	Indiana University , Bloomington, IN, USA	
	Professor, Department of Informatics	July 2023–August 2025
	Adjunct Professor, Department of Statistics	June 2014–August 2025
	Associate Professor, Department of Informatics	July 2018–June 2023
	Assistant Professor, Department of Informatics	Oct 2011–June 2018
	MIT , Boston, MA, USA	
	Visiting Professor	September 2020–August 2021
	Northeastern University , Boston, MA, USA	
	Post-doctoral research associate	June 2008–May 2011
	Dana-Farber Cancer Institute, Harvard University , Boston, MA, USA	
	Visiting Researcher	June 2008–May 2011
	Jacobs University , Bremen, Germany	
	ICTS fellow	March 2007–April 2007
	Visiting Researcher	July 2006–August 2006
	KAIST , Daejeon, South Korea	
	Postdoctoral Research Associate	February 2008–May 2008
	Research Assistant	March 2003–January 2008
	Teaching Assistant	March 2002–February 2003
ADVISORY BOARDS	Sungkyunkwan University	
	International Advisory Board, Data Science Program	March 2020–current
	Indiana University	
	IU Network Science Institute Advisory Board	2021–2023
INDUSTRIAL POSITIONS	Janys analytics	
	Co-founder & Data scientist	May 2011–2018
EDUCATION	Ph.D. Physics, KAIST (Daejeon, South Korea), February 2008	
	- Thesis topic: Organizing Principles and Dynamics of Complex Networks - Advisor: Professor Hawoong Jeong	
	M.S. Physics, KAIST (Daejeon, South Korea), February 2003	
	B.S. Physics, KAIST (Daejeon, South Korea), February 2001	
TEACHING	Instructor, Indiana University Bloomington	
	I606 Network Science (Online & Residential)	2018–2025
	DSCI590 Data Visualization (Online)	2017–2025
	I422/I590 Data Visualization (Residential)	2013–2024
	I590 Network Science (Online)	2016, 2017
	I709 Complex Systems Seminar II	2013, 2015
	H400/I400/I590 Data Visualization	2012–2014
	I590 Complex Networks and Their Applications	2012, 2014
	I211 Information Infrastructure II	2012
	H400/I400/I590 Visual Analytics	2012
	Teaching Assistant, KAIST	

ADVISING

Post-doctoral researchers

Seolmin Yang	2025–
Byunghwee Lee (co-mentors: Jisun An and Haewoon Kwak)	2024–
Attila Varga (co-mentors: Staša Milojević, Filippo Menczer, and Alessandro Flammini; Senior Research Fellow at ANETI Lab at Corvinus University of Budapest)	2020–2024
Sadamori Kojaku (co-mentors: Staša Milojević, Filippo Menczer, and Alessandro Flammini; Assistant Professor at Binghamton University)	2020–2023
Shirin Nilizadeh (co-mentor: Apu Kapadia; Associate Professor at University of Texas, Arlington)	2014–2015

Visitors

Taekho You (KAIST, South Korea)	2023–2024
Louis Boucherie (DTU, Denmark)	2023–2024
Ana Caroline Medeiros (Universidade de São Paulo, Brazil)	2023–2024
Damin Lee (POSTECH, South Korea)	2023–2024
Jisung Yoon (POSTECH, South Korea)	2019–2020
Woo-Sung Jung (POSTECH, South Korea)	2018–2019
Wooseong Jo (Sungkyunkwan University, South Korea)	2016–2017
Claudia Wagner (GESIS, Germany)	2014–2015
Yu-Xiao Zhu (University of Electronic Science and Technology of China, China)	2013–2015
Zhong-Yuan Zhang (Central University of Finance and Economics, China)	2012–2013

Ph.D. students

Govind Gandhi	current
Munjung Kim	current
Larry Zhang (co-advisor: Gregory Lewis)	current
Isabel Constantino	current
Wanying Zhao	current
Patrick Kaminski (co-advisor: Brea Perry)	current
Vincent Wong (co-advisor: Rob Goldstone)	current
Rachith Aiyappa (Applied Researcher at eBay)	2025
Lili Miao (Assistant Professor at Hong Kong University of Science Technology (Guangzhou))	2025
Dakota Murray (co-advisor: Cassidy Sugimoto; Assistant Professor at University of Albany)	2021
Nathaniel Rodriquez (Machine learning engineer at Boeing)	2021
Elise Jing (AI Engineer at Stealth Startup)	2021
Jaehyuk Park (Assistant Professor at Korea Development Institute)	2020
Qing Ke (Assistant Professor at City University of Hong Kong)	2018

Ph.D. research committees

Monica Marion, Herbert Sizek, Xuan Wang, Larry Zhang, and Wanying Zhao	current
Rachith Aiyappa, Lili Miao, Maria Pope, Youngheun Jo, Bao Tran Truong, Pei-Ying Chen, and Matthew DeVerna	2025
John Metzcar, Siddharth Patwardhan, Aditya Tandon, and Marina Dubova	–2024
Thomas Parmer, Benjamin Lockwood, David Terner, Miguel Pebes Trujillo, Ian Wood, Kai-Cheng Yang, John Bollenbacher, and He Zhou	–2023
Shreyas Fadnavis, Sina Kianersi, Daniele Notarmuzi, Clara Boothby, and Dan Myers	–2022
Tony Lam, Alexander Barron, Rui Zhang, Elise Jing, and Satoshi Tsutsui	–2021
Yi Bu, Zheng Gao, and Murat Ozturk	–2020

Pablo Moriano and Yeonjoon Lee	-2019
Chun Guo	-2018
Alexander Gates, Santosh Manicka, Onur Varol, and Azadeh Nematzadeh	-2017
Varsha KulKarni and Andrea Avena Koenigsberger	-2016
Artemy Kolchinsky, Richard Betzel and Abhik Seal	-2015
Haipeng Zhang, Xin Shuai, Huina Mao, Shirin Nilizadeh, Jaehong Shin, and Lilian Weng	-2014
Bin Chen	-2012
Ph.D. Qualifying committees	
Andrew Claros, Fares Fahad S. Alharbi, and Joshua Nunley	current
Fan Huang and Munjung Kim	2025
Govind Gandhi, Minsuk Kim, Monica Marion, Ozgur Can Seckin, Maria Klein, and Wanying Zhao	2024
Larry Zhang, Maria Pope, Youngheun Jo, and David Turner	2023
Matthew DeVerna, Bao Tran Truong, Rachith Aiyappa, Siddarth Patwardhan, Isabel Constantino, and Anne Kavelerchik	2022
Vincent Wong, He Zhou, Taufique Hussain, and Zoher Kachwala	2021
Dan Myers, Shreyas Fadnavis, Xuan Wang, Kai-Cheng Yang, and Kenzie Givens	2020
Dakota Murray, Lili Miao, and Elham Jafari	2019
Shantanu Jain, Andrea Avena Koenigsberger, Varsha Kulkarni, Abhik Seal, Richard Betzel, Ian Wood, Omar Sosa Tzec, Pablo Moriano, Qing Ke, Chun Guo, Alexander Gates	2011-2018
External Ph.D. thesis review/committees	
Yulin Yu, University of Michigan	current
Fengyuan Michael Liu, NYU Abu Dhabi	-2025
Vivek Sriram, University of Pennsylvania	-2023
Trenton Ford, University of Notre Dame	-2023
Laura Jahn, University of Copenhagen	-2023
Jisung Yoon, POSTECH	-2022
Indian Institute of Technology Patna	-2021
Caitlin Gray, University of Adelaide	-2020
Milli Letizia, Università degli Studi di Pisa	-2018
Michele Coscia, Università degli Studi di Pisa	-2012
M.S. and post-undergraduate students	
Godwin Atuahene	-2025
Kenzie Givens, Akash Patil, Rasika Muralidharan, Shruthi Senthilmani, and Krishna Jillelamudi	-2024
Ashutosh Tiwari, Riya Shetti, and Steven Fields	-2023
Ashutosh Hathidara	-2022
Chris Falter	-2021
Kathleen DeBrotta, Venkata Sai Dhakshesh Kolli, and Arunav Saikia	-2020
Matt Ardolino	-2019
Michael Uftring	-2018
Hao Peng	-2017
Supun Nakandala	-2016
Kengjeun Park, Harsh Pathak, and Prasanth Velamela	-2015
Soheil Jazayeri, Maiyaporn (Muk) Phanich	-2014
Dhaval Muchhala and Nakul Dhande	-2013
Ridhima Mahajan	-2012
Undergraduate students	
Jasmine Yang (IU, CeWIT Emerging Scholars REU-W)	2024-2025

Joe Malone (IU)	2024–2025
Roopa Akshadha Challa (IU, CeWIT Emerging Scholars REU-W)	2024
Anushree Divekar (IU, CEWIT Emerging Scholars REU-W)	2023–2024
Stuti Dewan (IU, CEWIT Emerging Scholars REU-W)	2022–2023
Paige Closser (IU, CEWIT Emerging Scholars REU-W)	2021–2022
Ferris Esposito, Jeremiah Stevens, and Yulin Yu (IU)	2018
Sarah Ewing and Anna Branam (IU)	2016
Luit Saikia and Shikun Ding (IU)	2015
Kehontas Rowe (Mills College) and Bryce Lewis (Bryn Mawr College)	2013

High school students (informal)

Sudhanva Deshpande, Mira Patel	2023
Ousman Berndt (Harmony School, Herald Times article)	2021
Chloe Kilman-Silver (Winsor School, co-advisors: Alan Mislove and Sune Lehmann)	2011

SELECTED HONORS

Teaching

- IU Trustees’ Teaching Award, 2023.

Conference

- ACM IMC Test of Time Award [[A99](#)], IMC, 2022
- Outstanding Reviewer Award, WSDM, 2021
- Best Paper Award [[A99](#)], ACM Internet Measurement Conference (IMC, San Diego, California, USA), 2007
- Best Oral Presentation Award, The 14th Workshop for Statistical Physics (Nami Island, Chuncheon, Korea), 2007

Scholarship

- Participant, Heidelberg Laureate Forum, 2013
- ICTS fellow, Jacobs University 2007
- Scholarship from DAAD (Germany) and KOSEF (Korea), 2006

Advisee & Mentee Achievements

- Wanying Zhao, Humane Studies Fellowship, Institute for Humane Studies, 2025
- Lili Miao, Eugene Garfield Doctoral Dissertation Scholarship, 2025
- Munjung Kim, Humane Studies Fellowship, Institute for Humane Studies, 2024
- Rachith Aiyappa, Humane Studies Fellowship, Institute for Humane Studies, 2024
- Lili Miao, Humane Studies Fellowship, Institute for Humane Studies, 2024
- Stuti Dewan, 1st place & People’s Choice Award in Women’s Research Poster Competition, 2024
- Stuti Dewan, 2nd place in Women’s Research Poster Competition, 2023
- Lili Miao, Excellence in Research Award, Luddy School of Informatics, Computing, and Engineering, 2022
- Lili Miao, Best Poster Award, International Conference on the Science of Science & Innovation (ICSSI), 2022

GRANTS, AWARDS, AND FELLOWSHIPS

List of grants and awards

- Co-PI, Sloan Foundation, Labor Implications of AI at the Nexus of Business Processes, Tasks, and Workers , 4/1/2025–3/31/2027
- PI, DoD AFOSR MURI, “BRAIN (Belief Resonance and AI Narratives): Understanding Belief-Narrative Resonance in the Era of Generative AI” , 3/1/2025–2/28/2030
- Co-PI, NSF APTO: Global Observatory and Virtual Laboratory for Science and Technology Advance , 9/1/2024–8/31/2028
- PI, NSF SoS:DCI: The scientific cost of isolationism: examining Brexit and the pandemic as

- natural experiments of disruptions in the global science system , 9/1/2024–8/31/2027
- Subcontractor, (PI: Erica Fuchs), NSF TIP: A National Network for Critical Technology Assessment: A First-Year Pilot, , 10/1/2022–9/30/2023
 - PI, NVIDIA hardware award, “Harnessing information stored in scholarly networks”, 8 NVIDIA A100 80GB GPU cards, 04/28/2022
 - PI, Vaccine Confidence Fund, “Vax That Thing Up”: The use of message framing and social contagion to promote vaccines in African American communities, 9/22/2021–02/28/2022
 - Co-PI (PI: Kristina Lerman), DARPA HR001121C0168, EDIFICE: Early Detection of Influence Indicators with Machine Intelligence, 8/1/2021–7/31/2025
 - Co-PI (PI: Richard Betzel), NSF 2023985, NCS-FO: Edge-centric maps of functional brain network organization and dynamics, 10/01/2020–09/30/2023
 - PI, AFOSR FA9550-19-1-0391, Science Genome: A Scholarly Graph Embedding Framework to Uncover the Fundamental Dynamics of Scientific Enterprise, 08/2019–7/2024
 - Co-PI (PI: Emilio Ferrara), DARPA W911NF17-C-0094, COSINE: Cognitive Online Simulation of Information Network Environments, 08/2017–12/2021
 - PI, Microsoft, Microsoft Azure Research Award, 2016.
 - Co-PI (PI: Cassidy Sugimoto), Indiana University, Faculty Research Support Program, 2016–2017.
 - Co-I (PI: Brea Perry), NIH, R01DA039928: Doctor Shopping for Controlled Substances: Insights from Two-Mode Social Network Analysis, 08/2016–06/2021.
 - Kavli Fellow, 2015: **Kavli Frontiers of Science** fellowship
 - LinkedIn Economic Graph Challenge, 2015: one of **the 11 winning teams**.
 - PI, Indiana University, Faculty Research Support Program, 09/2014–03/2015.
 - Microsoft Research Faculty Fellowship, 2014: one of **the seven fellows**.
 - Association of Korean Physicists in America, Outstanding Young Researcher Award, 2012: one of the two awardees selected in America.
 - The 1st KOBIC Bioinformatics Contents Contest, Grand prize, 2007

RECENT PUBLICATIONS

Books and Edited volumes

- [B1] James Bagrow and **Yong-Yeol Ahn**. *Working with Network Data: the Data Science of Networks*. Cambridge University Press, 2024. URL: <https://www.cambridge.org/network-data>.
- [B2] Sune Lehmann and **Yong-Yeol Ahn**, eds. *Complex Spreading Phenomena in Social Systems*. Springer, Cham, 2018. doi: [10.1007/978-3-319-77332-2](https://doi.org/10.1007/978-3-319-77332-2).

Preprints ([†]: equal contribution)

- [P1] Rachith Aiyappa, Shruthi Senthilmani, Jisun An, Haewoon Kwak, and **Yong-Yeol Ahn**. “Benchmarking zero-shot stance detection with FlanT5-XXL: Insights from training data, prompting, and decoding strategies into its near-SoTA performance”. In: *Submitted* (2025). arXiv: [2403.00236](https://arxiv.org/abs/2403.00236) [[cs.CL](#)].
- [P2] Laurent Hébert-Dufresne, **Yong-Yeol Ahn**, Antoine Allard, Jessica W. Crothers, Peter Sheridan Dodds, Mirta Galesic, Fakhteh Ghanbarnejad, Dominique Gravel, Ross A. Hammond, Kristina Lerman, Juniper Lovato, John J. Openshaw, S. Redner, Samuel V. Scarpino, Guillaume St-Onge, Timothy R. Tangherlini, and Jean-Gabriel Young. “One pathogen does not an epidemic make: A review of interacting contagions, diseases, beliefs, and stories”. In: *Submitted* (2025). arXiv: [2504.15053](https://arxiv.org/abs/2504.15053) [[physics.soc-ph](#)].
- [P3] Munjung Kim, Marios Constantinides, Sanja Šćepanović, **Yong-Yeol Ahn**, and Daniele Quercia. “The Potential Impact of Disruptive AI Innovations on U.S. Occupations”. In: *Submitted* (2025). arXiv: [2507.11403](https://arxiv.org/abs/2507.11403) [[cs.CY](#)].

- [P4] Munjung Kim, Sadamori Kojaku, and **Yong-Yeol Ahn**. “Uncovering simultaneous breakthroughs with a robust measure of disruptiveness”. In: *in submission* (2025). arXiv: [2502.16845 \[cs.SI\]](#).
- [P5] Sadamori Kojaku[†], Robert Mahari[†], Sandro Claudio Lera, Esteban Moro, Alex Pentland, and **Yong-Yeol Ahn**. “Community-centric modeling of citation dynamics explains collective citation patterns in science, law, and patents”. In: *Submitted* (2025). arXiv: [2501.15552 \[physics.soc-ph\]](#).
- [P6] Lili Miao, Vincent Larivière, Byungkyu Lee, **Yong-Yeol Ahn**, and Cassidy R. Sugimoto. “Persistent Hierarchy in Contemporary International Collaboration”. In: *in preparation* (2025). arXiv: [2410.13020 \[cs.DL\]](#).
- [P7] Lili Miao, Vincent Larivière, Feifei Wang, **Yong-Yeol Ahn**, and Cassidy R. Sugimoto. “Cooperation and interdependence in global science funding”. In: *Under review in Nature Communications* (2025). arXiv: [2308.08630 \[econ.GN\]](#).
- [P8] Minsu Park, Jaehyuk Park, Fabio Rojas, and **Yong-Yeol Ahn**. “Rap Music as a Social Reflection: Exploring the Relationship Between Social Conditions and Expressions of Violence and Materialism in Rap Lyrics”. In: *Submitted* (2025). DOI: [10.31235/osf.io/4tvn5](#).
- [P9] Tao Wen, Yu-Wang Chen, Jie Zhao, Changchun Pan, Tahir Abbas Syed, Kang Hao Cheong, and **Yong-Yeol Ahn**. “Early identification of information propagation sources through generalized Bayesian inference in large-scale social networks”. In: *Submitted* (2025).
- [P10] Guangyuan Weng, Minsuk Kim, **Yong-Yeol Ahn**, and Esteban Moro. “Beyond Distance: Mobility Neural Embeddings Reveal Visible and Invisible Barriers in Urban Space”. In: *In preparation* (2025). arXiv: [2506.24061 \[cs.CY\]](#).
- [P11] Woo Seong Jo, Jaehyuk Park, Arthur Luhur, Beom Jun Kim, and **Yong-Yeol Ahn**. “Extracting hierarchical backbones from bipartite networks”. In: *In preparation* (2023). arXiv: [2002.07239 \[cs.SI\]](#).
- [P12] Jaehyuk Park, Bogdan State, Monica Bhole, Michael Bailey, and **Yong-Yeol Ahn**. “People, Places, and Ties: Landscape of social places and their social network structures”. In: *In submission* (2023). arXiv: [2101.04737 \[cs.SI\]](#).

Published articles ([†]: equal contribution)

- [A1] Rachith Aiyappa, Xin Wang, Munjung Kim, Ozgur Can Seckin, **Yong-Yeol Ahn**, and Sadamori Kojaku. “Implicit degree bias in the link prediction task”. In: *Proceedings of the 42nd International Conference on Machine Learning (ICML)*. Vancouver, Canada, July 2025. arXiv: [2405.14985 \[cs.SI\]](#).
- [A2] Isabel Constantino, Sadamori Kojaku, Santo Fortunato, and **Yong-Yeol Ahn**. “Representing the Disciplinary Structure of Physics: A Comparative Evaluation of Graph and Text Embedding Methods”. In: *Quantitative Science Studies* 6 (2025), pp. 263–280. DOI: [10.1162/qss_a_00349](#). arXiv: [2308.15706 \[cs.SI\]](#).
- [A3] Matthew DeVerna, Francesco Pierri, **Yong-Yeol Ahn**, Santo Fortunato, Alessandro Flammini, and Filippo Menczer. “Modeling the amplification of epidemic spread by individuals exposed to misinformation on social media”. In: *npj Complexity* 2 (2025), p. 11. DOI: [10.1038/s44260-025-00038-y](#). arXiv: [2402.11351 \[cs.SI\]](#).
- [A4] Morgan Frank, **Yong-Yeol Ahn**, and Esteban Moro. “AI exposure predicts unemployment risk”. In: *PNAS Nexus* (*in press*) (2025), pgaf107. DOI: [10.1093/pnasnexus/pgaf107](#). arXiv: [2308.02624 \[cs.CY\]](#).

- [A5] Zhuoren Jiang, Xiaozhong Liu, Yangyang Kang, Changlong Sun, **Yong-Yeol Ahn**, and Johan Bollen. “Social inequality in awareness and reaction during the cryptic transmission period of pandemic”. In: *PNAS Nexus* 4 (2025), pgaf043. doi: [10.1093/pnasnexus/pgaf043](https://doi.org/10.1093/pnasnexus/pgaf043).
- [A6] Elise Jing, Simon DeDeo, Devin Wright, and **Yong-Yeol Ahn**. “Sameness entices, but novelty enchants in fanfiction online”. In: *Humanities and Social Sciences Communications* 12 (2025), p. 1018. arXiv: [1904.07741](https://arxiv.org/abs/1904.07741) [cs.CL].
- [A7] Byunghwee Lee, Rachith Aiyappa, **Yong-Yeol Ahn**, Haewoon Kwak, and Jisun An. “A semantic embedding space based on large language models for modelling human beliefs”. In: *Nature Human Behaviour* (2025). doi: <https://doi.org/10.1038/s41562-025-02228-z>. arXiv: [2408.07237](https://arxiv.org/abs/2408.07237) [cs.CL].
- [A8] Vivek Sriram, Jakob Woerner, **Yong-Yeol Ahn**, and Dokyoon Kim. “The interplay of sex and genotype in disease associations: a comprehensive network analysis in the UK Biobank”. In: *Human Genomics* 19 (2025), p. 4. doi: [10.1186/s40246-024-00710-9](https://doi.org/10.1186/s40246-024-00710-9).
- [A9] Rachith Aiyappa, Alessandro Flammini, and **Yong-Yeol Ahn**. “Emergence of simple and complex contagion dynamics from weighted belief networks”. In: *Science Advances* 10 (2024), eadh4439. doi: [10.1126/sciadv.adh4439](https://doi.org/10.1126/sciadv.adh4439). arXiv: [2301.02368](https://arxiv.org/abs/2301.02368) [cs.SI].
- [A10] Seongwoon Kim, **Yong-Yeol Ahn**, and Jaehyuk Park. “Labor Space: A Unifying Representation of the Labor Market via Large Language Models”. In: *Proceedings of the ACM on Web Conference 2024 (WWW)*. Singapore, Singapore, May 2024. doi: [10.1145/3589334.3645464](https://doi.org/10.1145/3589334.3645464).
- [A11] Sadamori Kojaku, Filippo Radicchi, **Yong-Yeol Ahn**, and Santo Fortunato. “Network community detection via neural embeddings”. In: *Nature Communications* 15 (2024), p. 9446. doi: [10.1038/s41467-024-52355-w](https://doi.org/10.1038/s41467-024-52355-w). arXiv: [2306.13400](https://arxiv.org/abs/2306.13400) [physics.soc-ph].
- [A12] Kangsan Lee, Jaehyuk Park, Sam Goree, David Crandall, and **Yong-Yeol Ahn**. “Social signals predict contemporary art prices better than visual features, particularly in emerging markets”. In: *Scientific Reports* 14 (2024), p. 11615. doi: [10.1038/s41598-024-60957-z](https://doi.org/10.1038/s41598-024-60957-z).
- [A13] Wanying Zhao, Fiona Guo, Kristina Lerman, and **Yong-Yeol Ahn**. “Discovering collective narratives shifts in online discussions”. In: *Proceedings of the 18th International AAAI Conference on Weblogs and Social Media (ICWSM)*. Buenos Aires, Argentina, Feb. 2024. doi: [10.1609/icwsml.v18i1.31427](https://doi.org/10.1609/icwsml.v18i1.31427). arXiv: [2307.08541](https://arxiv.org/abs/2307.08541) [cs.CL].
- [A14] Rachith Aiyappa, Jisun An, Haewoon Kwak, and **Yong-Yeol Ahn**. “Can we trust the evaluation on ChatGPT?” In: *Annual Conference of the Association for Computational Linguistics. TrustNLP: Third Workshop on Trustworthy Natural Language Processing*. 2023. doi: [10.18653/v1/2023.trustnlp-1.5](https://doi.org/10.18653/v1/2023.trustnlp-1.5).
- [A15] Maria E. Grabe, Danielle K. Brown, Jimmy Ochieng, John Bryden, Ranada D. Robinson, **Yong-Yeol Ahn**, Alana Moss, and Wei Wang. “The Social Contagion Potential of Pro-Vaccine Messages on Black Twitter”. In: *Health Communication* 39 (2023), pp. 2598–2609. doi: [10.1080/10410236.2023.2281075](https://doi.org/10.1080/10410236.2023.2281075).
- [A16] Sina Kianersi, Christina Ludema, Jon Agley, **Yong-Yeol Ahn**, Maria Parker, Sophie Ideker, and Molly Rosenberg. “Development and validation of a model for measuring alcohol consumption from transdermal alcohol content data among college students”. In: *Addiction* 118 (2023), pp. 2014–2025. doi: [10.1111/add.16228](https://doi.org/10.1111/add.16228).
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- [A88] **Yong-Yeol Ahn**[†], Sebastian E. Ahnert[†], James P. Bagrow, and Albert-László Barabási. “Flavor Network and the Principles of Food Pairing”. In: *Scientific Reports* 1 (2011), p. 196. doi: [10.1038/srep00196](#). arXiv: [1111.6074 \[physics.soc-ph\]](#).
- [A89] Arabidopsis Interactome Mapping Consortium. “Evidence for Network Evolution in an Arabidopsis Interactome Map”. In: *Science* 333 (2011), pp. 601–607. doi: [10.1126/science.1203877](#).
- [A90] Alan Mislove, Sune Lehmann, **Yong-Yeol Ahn**, Jukka-Pekka Onnela, and J. Niels Rosenquist. “Understanding The Demographics Of Twitter Users”. In: *Proceedings of the Fifth International AAAI Conference on Weblogs and Social Media (ICWSM’11)*. Barcelona, Spain, July 2011. doi: [10.1609/icwsm.v5i1.14168](#).
- [A91] Yunkyu Sohn, Myung-Kyu Choi, **Yong-Yeol Ahn**, Junho Lee, and Jaeseung Jeong. “Topological Cluster Analysis Reveals the Systemic Organization of the *Caenorhabditis elegans* Connectome”. In: *PLOS Computational Biology* 7 (2011), e1001139. doi: [10.1371/journal.pcbi.1001139](#).
- [A92] **Yong-Yeol Ahn**[†], James P. Bagrow[†], and Sune Lehmann[†]. “Link Communities Reveal Multi-scale Complexity in Networks”. In: *Nature* 466 (2010), pp. 761–764. doi: [10.1038/nature09182](#). arXiv: [0903.3178 \[physics.soc-ph\]](#).
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- [A95] Meeyoung Cha, Haewoon Kwak, Pablo Rodriguez, **Yong-Yeol Ahn**, and Sue Moon. “Analyzing the Video Popularity Characteristics of Large-Scale User Generated Content Systems”. In: *ACM/IEEE Transactions on Networking* 17 (2009), pp. 1357–1370. doi: [10.1109/TNET.2008.2011358](#).
- [A96] Hyunwoo Chun, Haewoon Kwak, Young-Ho Eom, **Yong-Yeol Ahn**, Sue Moon, and Hawoong Jeong. “Comparison of online social relations in terms of volume vs. interaction: a case study of cyworld”. In: *Proceedings of ACM Internet Measurement Conference (IMC’08)*. Vouliagmeni, Greece, Oct. 2008. doi: [10.1145/1452520.1452528](#).
- [A97] Filippo Radicchi, **Yong-Yeol Ahn**, and Hildegard Meyer-Ortmanns. “Impact of the updating scheme on stationary states of networks”. In: *J. Phys. A: Math. Theor.* 41 (2008), p. 224010. doi: [10.1088/1751-8113/41/22/224010](#).

- [A98] **Yong-Yeol Ahn**, Seungyup Han, Haewoon Kwak, Sue Moon, and Hawoong Jeong. "Analysis of topological characteristics of huge online social networking services". In: *Proceedings of the 16th International World Wide Web Conference (WWW'07)*. Banff, Alberta, Canada, May 2007. DOI: [10.1145/1242572.1242685](#).
- [A99] Meeyoung Cha, Haewoon Kwak, Pablo Rodriguez, **Yong-Yeol Ahn**, and Sue Moon. "I Tube, You Tube, Everybody Tubes: Analyzing the world's largest user generated content video system". In: *Proceedings of ACM Internet Measurement Conference (IMC'07)*. San Diego, CA, USA, Oct. 2007. DOI: [10.1145/1298306.1298309](#).
- [A100] **Yong-Yeol Ahn**, Beom Jun Kim, and Hawoong Jeong. "Wiring cost in the organization of a biological neuronal network". In: *Physica A* 367 (2006), pp. 531–537. DOI: [10.1016/j.cub.2016.08.053](#). arXiv:q-bio: [0505009](#) (q-bio.NC).
- [A101] **Yong-Yeol Ahn**, Naoki Masuda, Hawoong Jeong, and Jae Dong Noh. "Epidemic dynamics of two species of interacting particles on scale-free networks". In: *Physical Review E* 74 (2006), p. 066113. DOI: [10.1103/PhysRevE.74.066113](#). arXiv: [0608461](#) [[cond-mat.stat-mech](#)].
- [A102] Seungyup Han, **Yong-Yeol Ahn**, Sue Moon, and Hawoong Jeong. "Collaborative blog spam filtering using adaptive percolation search". In: *Proceedings of the 15th International World Wide Web Conference, workshop on the Weblogging Ecosystem (WWW'06)*. Edinburgh, Scotland, May 2006.
- [A103] Dong-Hee Kim, Seung-Woo Son, **Yong-Yeol Ahn**, Pan-Jun Kim, Young-Ho Eom, and Hawoong Jeong. "Underlying scale-free trees in complex networks". In: *Progress of Theoretical Physics Supplement* 157 (2005), p. 213. DOI: [10.1143/PTPS.157.213](#).
- [A104] Jae Dong Noh, Hyung-Chai Jeong, **Yong-Yeol Ahn**, and Hawoong Jeong. "Growing network model for community with group structure". In: *Physical Review E* 71 (2005), p. 036131. DOI: [10.1103/PhysRevE.71.036131](#). arXiv: [0412149](#) [[cond-mat.other](#)].
- [A105] Seung-Woo Son, Dong-Hee Kim, **Yong-Yeol Ahn**, and Hawoong Jeong. "Response Network Emerging from Simple Perturbation". In: *Journal of Korean Physics Society* 44 (2004), p. 628.

Book chapters

- [C1] Pik-Mai Hui, Lilian Weng, Alireza Sahami Shirazi, **Yong-Yeol Ahn**, and Filippo Menczer. "Scalable Detection of Viral Memes from Diffusion Patterns". In: ed. by Sune Lehmann and **Yong-Yeol Ahn**. Springer, Cham, 2018, pp. 197–211. DOI: [10.1007/978-3-319-77332-2_11](#).
- [C2] Sune Lehmann and **Yong-Yeol Ahn**. "Spreading in Social Systems: Reflections". In: ed. by Sune Lehmann and **Yong-Yeol Ahn**. Springer, Cham, 2018, pp. 351–358. DOI: [10.1007/978-3-319-77332-2_19](#). arXiv: [1801.02236](#) [[physics.soc-ph](#)].
- [C3] Azadeh Nematzadeh, Nathaniel Rodriguez, Alessandro Flammini, and **Yong-Yeol Ahn**. "Optimal Modularity in Complex Contagion". In: ed. by Sune Lehmann and **Yong-Yeol Ahn**. Springer, Cham, 2018, pp. 97–107. DOI: [10.1007/978-3-319-77332-2_6](#). arXiv: [1806.00074](#) [[physics.soc-ph](#)].

Patents

- [T1] **Yong-Yeol Ahn**, Lilian Weng, and Filippo Menczer. "Systems and methods to predict meme virality using network structure". US 10289955B2 (US). May 2019.

Other Works

- [X1] Alan Mislove, Sune Lehmann, **Yong-Yeol Ahn**, Jukka-Pekka Onnela, and J. Niels Rosenquist. *Pulse of the Nation*. 2012 Beijing Design Week. 2012.

- [X2] Alan Mislove, Sune Lehmann, **Yong-Yeol Ahn**, and Chloe Kliman-Silver. *Tweets mentioning “earthquake” immediately following Virginia earthquake on 08/23/2011*. http://www.youtube.com/watch?v=XJ1EQbmJ_LQ. 2011.
- [X3] **Yong-Yeol Ahn**, Sebastian E. Ahnert, James P. Bagrow, and Albert-László Barabási. *Flavor Network*. Edge-Serpentine Gallery exhibition, “Maps for the 21st Century”, <http://www.edge.org/documents/Edge-Serpentine-MapsGallery/>. 2010.
- [X4] Alan Mislove, Sune Lehmann, **Yong-Yeol Ahn**, Jukka-Pekka Onnela, and J. Niels Rosenquist. *Mapping the Conversation: Political Topics and Geography on Twitter*. <http://election.ccs.neu.edu>. 2010.
- [X5] Alan Mislove, Sune Lehmann, **Yong-Yeol Ahn**, Jukka-Pekka Onnela, and J. Niels Rosenquist. *Pulse of the Nation*. Foosaner Art Museum, “The Art of Networks”, <http://isabelmeirelles.com/exhibit-the-art-of-networks/>. 2010.
- [X6] Alan Mislove, Sune Lehmann, **Yong-Yeol Ahn**, Jukka-Pekka Onnela, and J. Niels Rosenquist. *Pulse of the Nation: US mood throughout the day inferred from Twitter*. <http://www.ccs.neu.edu/home/amislove/twittermood/>. 2010.
- [X7] **Yong-Yeol Ahn**, James P. Bagrow, Sune Lehmann, and Alec Pawling. *Twittermood: United States Map of Mood*. <http://twittermood.net>. 2009.

SELECTED TALKS

Invited conference talks and lectures

- Keynote at CIKM (Seoul, South Korea) 11/13/2025
- ICSSI Plenary talk (Washington DC, USA) 07/01/2024
- 24 Hour Macroscopes Vision for the (AI) Future Panel 12/10/2023
- ICSSI'23 Method Panel (Evanston, IL) 06/27/2023
- SFI Workshop on Interacting Contagions (Santa Fe, NM) 04/20/2023
- The Science of Team Science and Innovation Workshop (NetSci 2022 satellite) 07/16/2022
- A flash workshop on Science of Science at APCTP (Pohang, South Korea) 06/01/2022
- SFI Workshop “A New Synthesis for the Science of Science” (Santa Fe, NM) 05/04/2022
- Multiplex Brain Networks Workshop (Banff, Canada) 04/23/2022
- Keynote at IC2S2 2021 (Zurich, Switzerland) 07/31/2021
- Complex Networks in Economics and Innovation (Networks 2021 satellite) 06/30/2021
- CADRE Workshop (Networks 2021 satellite) 06/23/2021
- Summer Institute in Computational Social Science (Beijing, China) 06/21/2021
- Quantifying Success Satellite at NetSci 2020 (Rome, Italy) 09/17/2020
- Net-COVID: Understanding and Exploring Network Epidemiology in the Time of Coronavirus (U. Maryland) 04/16/2020
- Korean Society of Food Science and Nutrition (Jeju, South Korea) 10/23/2019
- UVM PhD Research Day (Burlington, VT) 09/06/2019
- EAR Learning: Machines, Brains & Children workshop (Bloomington, IN) 05/18/2019
- International Workshop on Function, Information Spreading, and Percolation in Brain Networks (Pohang, South Korea) 05/13/2019
- Workshop & International Symposium on Complexity Science Approaches to Brain Dynamics (Calgary, Canada) 10/02/2018
- American Mathematical Society meeting Special Session on Network Theory (Bloomington, IN) 04/01/2017
- Data Science meets Social Science, Indiana University (Bloomington, IN) 11/03/2016
- ACM 10th Intl. Workshop on Data and Text Mining in Biomedical Informatics (DTMBIO) 2016 (Indianapolis, IN) 10/28/2016
- International Workshop on Science and Culture (Seoul, South Korea) 06/04/2016

• NetSci 2016 (Seoul, South Korea)	06/03/2016
• Network of Networks (NetoNets) Satellite at NetSci 2016 (Seoul, South Korea)	05/30/2016
• Social Connectome Satellite at NetSci 2016 (Seoul, South Korea)	05/30/2016
• Higher Order Models in Network Science (HONS) Satellite at NetSci 2016 (Seoul, South Korea)	05/30/2016
• Mathematical Analysis of Cultural Expressive Forms: Text Data, IPAM Cultural Analytics Long Program	05/23/2016
• Culture Analytics Beyond Text: Image, Music, Video, Interactivity and Performance, IPAM Cultural Analytics Long Program	03/23/2016
• Information & Library Science Doctoral Symposium, IU	10/25/2014
• Computational Gastronomy—Food in the Age of Data (The Royal Society Workshop, Chicheley, UK; co-organizer)	09/29/2014
• ChASM 2014: Computational Approaches to Social Modeling (WebSci 2014 workshop, Bloomington, IN)	06/23/2014
• COVENANT 2013: Collective Behaviors and Networks (a satellite event of ECCS, Barcelona, Spain)	09/19/2013
• Quantifying Success (a satellite event of ECCS, Barcelona, Spain)	09/18/2013
• UKC2013 (East Rutherford, NJ)	08/07/2013
• International Workshop on Social Computing 2013 (Seoul, South Korea)	07/27/2013
• Workshop on Time-Dependent and Multiplex Networks (University of Oxford, United Kingdom)	07/08/2013
• Wolfram Data Summit 2012 (Washington, DC)	09/07/2012
• Arts, Humanities, and Complex Networks (Leonardo satellite symposium at NetSci2012, Evanston, IL)	06/19/2012
• Cambridge Networks Day 2012 (University of Cambridge, United Kingdom)	05/18/2012
• Gastronomy & Technology Days 2011 (Telefonica, Barcelona, Spain)	10/18/2011
• 2011 Summer School on Social Network Analysis (NIMS, Daejeon, South Korea)	08/06/2011
• Using online social networks research to improve health (Columbia University, New York, NY)	05/23/2011
• 5th APCTP-KIAS Winter School on Statistical Physics (Phoenix park, South Korea)	01/28/2008

Invited Colloquia and Seminars (†: postponed or canceled due to COVID-19 pandemic)

• Weatherhead School of Management, Case Western Reserve University	03/26/2025
• Kelley School of Business, Indiana University	05/22/2024
• School of Data Science, University of Virginia	05/16/2024
• School of Information, University of Michigan	09/22/2023
• University of Exeter	03/24/2023
• Network Science Institute, Northeastern University	02/23/2023
• MIT Media Lab	02/22/2023
• NICO, Northwestern University	02/15/2023
• Carnegie Mellon University	01/19/2023
• University of Pittsburgh	01/18/2023
• Databricks	11/17/2022
• Center for the Study of Complex Systems, University of Michigan	11/15/2022
• IUNI Colloquium, Indiana University	10/28/2022
• STRUDEL group, CMU	04/19/2022
• Data Visualization Bazaar, Indiana University	04/05/2022
• NeuroTech, UIUC	10/28/2021

• PittCSS, University of Pittsburgh	10/22/2021
• Department of Physics, University of Florida	10/14/2021
• IBS Data Science Group, South Korea	08/16/2021
• Socar, South Korea	06/29/2021
• Tobacco Control and Wellness Research Working Group, Indiana University	01/29/2021
• CUDAN, Tallinn University, Estonia	11/30/2020
• AiFrenz, South Korea	05/13/2020
• [†] Engineering Sciences & Applied Mathematics, Northwestern University	04/13/2020
• NICO, Northwestern University	12/03/2019
• Department of Communication Studies, Northwestern University	12/02/2019
• Product and Sustainability Analytics, Ford Motor Company	07/09/2019
• KISTI, South Korea	07/01/2019
• Department of Public Administration, Korea University, South Korea	07/01/2019
• KIST, South Korea	06/27/2019
• Coordinated Science Lab, UIUC, IL	11/26/2018
• Department of Physics and Astronomy, University of Calgary, Canada	09/28/2018
• IU Food Institute	11/30/2017
• Bloomington Rotary Club	03/01/2016
• School of Medicine, Indiana University, IN	11/30/2015
• USC Information Sciences Institute, CA	11/04/2015
• Information and Library Science Colloquium, Indiana University, IN	03/06/2015
• Computer Science Colloquium, Indiana University, IN	11/14/2014
• Department of Biology Colloquium, Write State University, OH	10/20/2014
• University of Oxford, UK	10/02/2014
• LinkedIn	08/19/2014
• Facebook	06/06/2014
• Department of Physics, SNU, South Korea	05/19/2014
• Department of Computer Science, KAIST, South Korea	05/16/2014
• POSTECH, South Korea	05/15/2014
• KIAS, South Korea	05/14/2014
• Technology Management, Economics and Policy Program, SNU, South Korea	05/13/2014
• Sungkyunkwan University, South Korea	05/13/2014
• School of Culture Technology, KAIST, South Korea	05/12/2014
• Data Science Seminar, University of Washington, WA	03/19/2014
• Network Science Talks series, Indiana University, IN	10/28/2013
• DIMACS, Rutgers University, NJ	03/04/2013
• Department of Computer & Information Science, IUPUI, IN	01/11/2013
• Wolfram Research, IL	10/25/2012
• Department of Statistics Colloquium, IUB, IN	09/24/2012
• Computer Science & Engineering, University of Washington, WA	07/19/2012
• IBM Watson Research Center, NY	06/15/2012
• Center for Social Data, DTU, Denmark	05/24/2012
• School of Informatics Colloquium, IUPUI, IN	03/09/2012
• Department of Physics Colloquium, Ohio State University, OH	01/03/2012
• Dept. of Computer Science, KAIST, South Korea	07/18/2011
• BECS, Aalto University, Finland	05/09/2011
• Dept. of Physics, University of Notre Dame, IN	03/10/2011
• School of Informatics and Computing, IUB, IN	03/03/2011
• Dept. of Brain and Cognitive Science, SNU, South Korea	11/26/2010
• Dept. of Computer Science, UMASS Boston, MA	10/14/2010
• SCANS seminar series, CCIS, Northeastern University, MA	10/05/2010

- APCTP, Pohang, South Korea 07/20/2010
- Dept. of Industrial & Systems Engineering, KAIST, South Korea 07/23/2010
- Dept. of Computer Science, KAIST, South Korea 07/09/2010

SERVICE

Editorial services

- Associate Editor, *Science Advances* (2025–present)
- Editorial Board Member, *PeerJ Computer Science* (2024–present)
- Advisory Board Member, *Human Computation* (Journal, 2014–present).
- Academic Editor, *PLOS ONE* (2018–2024)
- Associate Editor, *Frontiers in Big Data* (2021–2022)
- Academic Editor for the special issue “Science of Stories”, *PLOS ONE* (2018–2019)
- Editor (with Sune Lehmann), *Complex Spreading Phenomena in Social Systems*, Springer (2018).
- Editor (with Emma Spiro), *Proceedings of 8th International Conference on Social Informatics* Volume I & II (2016).

Organization

- Scientific Committee, *ISSI 2023* (Bloomington, IN). 07/2023
- Publicity Chair, *ICSSI2022* (Washington DC). 06/2022
- Program Co-chair, *NetSci 2017* (Indianapolis, IN). 06/2017
- Program Co-chair, *SocInfo 2016* (Bellevue, WA). 11/2016
- Co-organizer, *COOL2014 (Connecting Online & Offline Life)*, a WWW’14 workshop (Seoul, South Korea). 04/2013
- Co-organizer, *Computational Gastronomy: Food in the Age of Data*, a Royal Society International Scientific Seminar (Buckinghamshire, UK). 09/2014

Committees

- Member, Standing Committee on Advancing Science Communication, National Academies, USA.

Reviewer

- Departmental reviewer: Complex Systems and Data Science program (University of Vermont), 2025.
- Funding (US): NSF, NIH, John Templeton Foundation, Harris Faculty Fellowship (Grinnell College)
- Funding (International): Irish Research Council (Ireland), Royal Society Te Apārangi (New Zealand), Fondazione Cariplo (Italy)
- General: *Nature*, *Science*, *PNAS*, *Nature Communications*, *Science Advances*, *Nature Machine Intelligence*, *Nature Human Behaviors*, *Royal Society Open Science*, *EPJ Data Science*, *Scientific Reports*, *PLoS ONE*
- Mathematics, Physics, Network Science: *Physical Review Letters*, *Nature Physics*, *Physical Review X*, *Communications Physics*, *EPL*, *Physics Letters A*, *NPJ Complexity*, *JSTAT*, *Physical Review E*, *Physica A*, *European Physical Journal B*, *European Journal of Applied Mathematics*, *Network Science*, *Applied Network Science*
- Biology: *PLoS Computational Biology*, *BMC Systems Biology*, *IET Systems Biology*
- Medicine: *Journal of Obesity*
- Computer Science: *WWW’09*, *SIGKDD’10*, *ACM Transactions on Intelligent Systems and Technology*, *ACM Transactions on Knowledge Discovery from Data*
- Science of Science: *Quantitative Science Studies*
- Others: *Perspectives on Psychological Science*, *Journal of Computational Social Science*, *Journal of Computer-Mediated Communication*, *Palgrave Communications*, *Journal of Obesity*, *Leonardo*

PC member

- IC2S2: 2015, 2017, 2023–2025
- NERCCS: 2020, 2025
- ICLR: 2024
- ACL: 2024
- ICWSM: 2014–2018, 2024
- Cultural Data Analytics Conference: 2023
- ISSI: 2023
- ICSSI: 2022
- NetSci: 2015, 2018, 2020, 2022
- The Web Conference (WWW): 2012–2017, 2021 (Senior PC).
- WSDM: 2021 (Outstanding Reviewer Award)
- ICWSM NECO workshop: 2018, 2020
- CompleNet: 2010, 2012–2016, 2019
- DTMBIO: 2017
- CCS: 2017
- ASONAM: 2015.
- GLBIO: 2015.
- SocInfo: 2014 (Best Reviewer Finalist), 2015.
- ECCS Computational Social Science workshop: 2014.
- WebSci: 2014.
- WWW SIMPLEX workshop: 2013.
- ECCS COVENANT workshop: 2013.

University and Departmental services

- Judge, IU Women's Research Poster Competition, 2022–2025
- Promotion Committee, 2024–current
- Social, Behavioral, and Brain Health Project Development Team, 2024–current
- Climate Action Plan Implementation Committee, 2024–current
- Online learning committee, 2023–current
- Co-chair, IU Transportation Working Group, 2023–current
- Transportation Policy and Safety Committee, 2022–current
- Promotion Committee, 2023–2024
- Chair, Expedited Tenure/Promotion Committee, 2023
- Luddy Fellow Selection Committee, 2023
- Informatics Executive committee, 2022–2023
- Third-year review committee, Statistics, 2023
- AI certificate task force, 2021–2023
- Hiring committee (AI & Networks, 2021–2022)
- Chair, Tenure Committee, Informatics, 2021–2022
- Indiana AI Week Organization committee, 2021
- (Sabbatical 2020–2021)
- Director of Undergraduate Studies, Informatics, 2019–2020
- Chair, Informatics colloquium committee, 2018–2019
- Artificial Intelligence Task Force, 2019
- Hiring committee (Emerging Areas Research: Learning: Brains, Machines, and Children 2018–2019)
- School policy committee, School of Informatics, Computing, and Engineering, 2016–2019
- Informatics colloquium committee, 2013–2018
- Co-chair, Data Science Structure Task Force, 2017
- Bloomington Faculty Council (SoIC representative), 2015–2017
- Technology Policies Committee, 2015–2016
- Hiring Committee (Complex Systems, 2014–2015)
- Indiana Clinical and Translational Sciences Institute (CTSI), Health & Network Project De-

velopment Team (2012–2015): participating in a committee that reviews CTSI seed grants and mentors team building and project development.

- School website committee (2013–2014): planned and launched a new website for the new school (SOIC+SLIS)
- Hiring Committee (Data Science, 2013–2014)
- Undergraduate lecturer and advisor hiring committee (2013)
- Hiring committee (Complex Systems, 2012–2013)
- SOIC-SLIS merger retreat planning committee (2012): planned and organized the retreat for discussing the SOIC-SLIS merger.