Kai-Cheng Yang

CONTACT
INFORMATION

School of Computing
Binghamton University
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APPOINTMENTS
AFFILIATIONS

Binghamton University, Binghamton, NY

Assistant Professor, School of Computing — Aug. 2025 –

Northeastern University, MA, US

Postdoctoral Research Associate, Network Science Institute — Aug. 2023 – Aug. 2025

EDUCATION

Ph.D., Informatics, Indiana University, IN, US (Dissertation [O2]) — Jun. 2023
B.S./M.S., Theoretical Physics, Lanzhou University, China — Jun. 2017

RESEARCH
INTERESTS

My research focuses on creating safe, fair, and trustworthy online information platforms by identifying how **malicious actors** and **flawed systems distort information flow** and developing effective **countermeasures**.

Current Focuses:

- **Generative AI in online platforms**: creating fake accounts [J5, J6]; AI systems as information curators [R1, C1]; combating misinformation [R2, C3, J7]; public perception [J4]
- **Classic social media bot**: detection (Botometer®) [J11, C5, C6, J26]; characterization [J13, W7]; human perception [J9, J21];
- **Misinformation**: prevalence [J8, J17, W5]; dissemination [J29]; real-world impact [J15];

Past Projects:

- **US opioid epidemic**: intervention policy evaluation [J19]; high-risk patients [J10, J14, J27]; impact of COVID-19 [J18];
- **Network science**: embedding [J22–J24]; spreading phenomenon [R4, J28, J30];

PUBLICATIONS
GOOGLE SCHOLAR

‡: as corresponding author; †: mentored student

Journal Articles

J1. **Yang, K.-C.**‡, Goel, P., Quintana-Mathé, A., Horgan, L., McCabe, S. D., Grinberg, N., Joseph, K. & Lazer, D. DomainDemo: a dataset of domain-sharing activities among different demographic groups on Twitter. *Scientific Data* **12,** 1251 (2025).

J2. Cresci, S., **Yang, K.-C.**, Spognardi, A., Di Pietro, R., Menczer, F. & Petrocchi, M. Demystifying Misconceptions in Social Bots Research. *Social Science Computer Review* **0,** 08944393251376707 (2025).

J3. Duan, Z., Shao, A., Hu, Y., Lee, H., Liao, X., Suh, Y. J., Kim, J., **Yang, K.-C.**, Chen, K. & Yang, S. Constructing Vec-tionaries to Extract Message Features from Texts: A Case Study of Moral Content. *Political Analysis,* 1–21 (2025).

J4. Yan, H., Morrow, G., **Yang, K.-C.** & Wihbey, J. The origin of public concerns over AI supercharging misinformation in the 2024 U.S. presidential election. *The Harvard Kennedy School (HKS) Misinformation Review* **6** (2025).

J5. **Yang, K.-C.**‡ & Menczer, F. Anatomy of an AI-powered malicious social botnet. *Journal of Quantitative Description: Digital Media* **4** (2024).

J6. **Yang, K.-C.**[‡], Singh, D.[†] & Menczer, F. Characteristics and prevalence of fake social media profiles with AI-generated faces. *Journal of Online Trust and Safety* **2** (2024).

J7. DeVerna, M. R., Yan, H., **Yang, K.-C.** & Menczer, F. Fact-checking information from large language models can decrease headline discernment. *Proceedings of the National Academy of Sciences* **121,** e2322823121 (2024).

J8. Pierri, F., DeVerna, M. R., **Yang, K.-C.**, Axelrod, D., Bryden, J. & Menczer, F. One Year of COVID-19 Vaccine Misinformation on Twitter: Longitudinal Study. *Journal of Medical Internet Research* **25,** e42227 (2023).

J9. Yan, H., **Yang, K.-C.**, Shanahan, J. & Menczer, F. Exposure to social bots amplifies perceptual biases and regulation propensity. *Scientific Reports* **13,** 20707 (2023).

J10. **Yang, K.-C.**, Aronson, B., Odabas, M., Ahn, Y.-Y. & Perry, B. L. Comparing measures of centrality in bipartite patient-prescriber networks: A study of drug seeking for opioid analgesics. *PLoS ONE* **17,** e0273569 (2022).

J11. **Yang, K.-C.**[‡], Ferrara, E. & Menczer, F. Botometer 101: Social bot practicum for computational social scientists. *Journal of Computational Social Science* **5,** 1511–1528 (2022).

J12. **Yang, K.-C.**[‡], Hui, P.-M. & Menczer, F. How Twitter data sampling biases U.S. voter behavior characterizations. *PeerJ Computer Science* **8,** e1025 (2022).

J13. Duan, Z., Li, J., Lukito, J., **Yang, K.-C.**, Chen, F., Shah, D. V. & Yang, S. Algorithmic Agents in the Hybrid Media System: Social Bots, Selective Amplification, and Partisan News about COVID-19. *Human Communication Research* **48,** 516–542 (2022).

J14. Perry, B. L., Odabas, M., **Yang, K.-C.**, Lee, B., Kaminski, P., Aronson, B., Ahn, Y.-Y., Oser, C. B., Freeman, P. R. & Talbert, J. C. New means, new measures: Assessing prescription drug seeking indicators over ten years of the opioid epidemic. *Addiction* **117,** 195–204 (2022).

J15. Pierri, F., Perry, B. L., DeVerna, M., **Yang, K.-C.**, Flammini, A., Menczer, F. & Bryden, J. Online misinformation is linked to early COVID-19 vaccination hesitancy and refusal. *Scientific Reports* **12,** 5966 (2022).

J16. **Yang, K.-C.**, Lee, B., Ahn, Y.-Y. & Perry, B. L. Use of and Comorbidities Associated With Diagnostic Codes for COVID-19 in US Health Insurance Claims. *JAMA Network Open* **4,** e2124643 (2021).

J17. **Yang, K.-C.**[‡], Pierri, F., Hui, P.-M., Axelrod, D., Torres-Lugo, C., Bryden, J. & Menczer, F. The COVID-19 Infodemic: Twitter versus Facebook. *Big Data & Society* **8,** 20539517211013861 (2021).

J18. Lee, B., **Yang, K.-C.**, Kaminski, P., Ahn, Y.-Y., Peng, S., Odabas, M., Gupta, S., Green, H. & Perry, B. L. Substitution of Nonpharmacologic Therapy With Opioid Prescribing for Pain During the COVID-19 Pandemic. *JAMA Network Open* **4,** e2138453 (2021).

J19. Lee, B., Zhao, W., **Yang, K.-C.**, Ahn, Y.-Y. & Perry, B. L. Systematic Evaluation of State Policy Interventions Targeting the US Opioid Epidemic, 2007-2018. *JAMA Network Open* **4,** e2036687 (2021).

J20. Wen, C., Pacheco, D., **Yang, K.-C.** & Menczer, F. Neutral bots probe political bias on social media. *Nature Communications* **12,** 5580 (2021).

J21. Yan, H., **Yang, K.-C.**, Menczer, F. & Shanahan, J. Asymmetrical Perceptions of Partisan Political Bots. *New Media & Society* **23,** 3016–3037 (2021).

J22. Yoon, J., **Yang, K.-C.**, Jung, W.-S. & Ahn, Y.-Y. Persona2vec: A Flexible Multi-role Representations Learning Framework for Graphs. *PeerJ Computer Science* **7,** e174 (2021).

J23. Zhang, Y.-J., **Yang, K.-C.** & Radicchi, F. Model-free hidden geometry of complex networks. *Physical Reviews E* **103,** 012305 (2021).

J24. Zhang, Y.-J., **Yang, K.-C.** & Radicchi, F. Systematic comparison of graph embedding methods in practical tasks. *Physical Reviews E* **104,** 044315 (2021).

J25. Pasquetto, I. V., Swire-Thompson, B., Amazeen, M. A., Benevenuto, F., Brashier, N., Bond, R. M., Bozarth, L. C., Budak, C., Ecker, U. K., ... & **Yang, K.-C.** Tackling misinformation: What researchers could do with social media data. *The Harvard Kennedy School (HKS) Misinformation Review* **1** (2020).

J26. **Yang, K.-C.**, Varol, O., Davis, C. A., Ferrara, E., Flammini, A. & Menczer, F. Arming the public with artificial intelligence to counter social bots. *Human Behavior and Emerging Technologies,* e115 (2019).

J27. Perry, B. L., **Yang, K.-C.**, Kaminski, P., Odabas, M., Park, J., Martel, M., Oser, C. B., Freeman, P. R., Ahn, Y.-Y. & Talbert, J. Co-prescription network reveals social dynamics of opioid doctor shopping. *PLoS ONE* **14,** e0223849 (2019).

J28. Zhang, Y.-J., Wu, Z.-X., Holme, P. & **Yang, K.-C.** Advantage of Being Multicomponent and Spatial: Multipartite Viruses Colonize Structured Populations with Lower Thresholds. *Physical Reviews Letters* **123.** (Editors' Suggestion), 138101 (2019).

J29. Shao, C., Ciampaglia, G. L., Varol, O., **Yang, K.-C.**, Flammini, A. & Menczer, F. The spread of low-credibility content by social bots. *Nature Communications* **9,** 4787 (2018).

J30. **Yang, K.-C.**, Wu, Z.-X., Holme, P. & Nonaka, E. Expansion of cooperatively growing populations: Optimal migration rates and habitat network structures. *Physical Reviews E* **95,** 012306 (2017).

Peer-reviewed Conference Proceedings

C1. **Yang, K.-C.**[‡] & Menczer, F. *Accuracy and Political Bias of News Source Credibility Ratings by Large Language Models* in *Proceedings of the 17th ACM Web Science Conference (WebSci)* (New Brunswick, NJ, USA, 2025), 127–137.

C2. Scarano, S., Vasudevan, V., Samory, M., **Yang, K.-C.**, Yang, J. & Grabowicz, P. A. *Election Polls on Social Media: Prevalence, Biases, and Voter Fraud Beliefs* in *Proceedings of the International AAAI Conference on Web and Social Media (ICWSM)* **19** (Copenhagen, Denmark, 2025), 1771–1785.

C3. Alexander, J. H.[†], Nanda, P. H., **Yang, K.-C.** & Sarvghad, A. *Can GPT-4 Models Detect Misleading Visualizations?* in *2024 IEEE Visualization and Visual Analytics (VIS)* (2024), 106–110.

C4. Torres-Lugo, C., **Yang, K.-C.** & Menczer, F. *The Manufacture of Partisan Echo Chambers by Follow Train Abuse on Twitter* in *Proceedings of the International AAAI Conference on Web and Social Media (ICWSM)* **16** (Atlanta, GA, USA, 2022), 1017–1028.

C5. **Yang, K.-C.**[‡], Varol, O., Hui, P.-M. & Menczer, F. *Scalable and Generalizable Social Bot Detection through Data Selection* in *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)* **34** (New York, NY, USA, 2020), 1096–1103.

C6. Sayyadiharikandeh, M., Varol, O., **Yang, K.-C.**, Flammini, A. & Menczer, F. *Detection of Novel Social Bots by Ensembles of Specialized Classifiers* in *Proceedings of the 29th ACM International Conference on Information & Knowledge Management (CIKM)* (Virtual, 2020), 2725–2732.

Peer-reviewed Workshop/Demo/Dataset/Software Papers

W1. Feal, A., Gleason, J., Goel, P., Radford, J., **Yang, K.-C.**, Basl, J., Meyer, M., Choffnes, D., Wilson, C. & Lazer, D. *Introduction to National Internet Observatory* in *Proceedings of ICWSM Data Challenge Workshop* (Buffalo, NY, USA, 2024).

W2. Aiyappa, R., DeVerna, M. R., Pote, M., Tran Truong, B., Zhao, W., Axelrod, D., Pessianzadeh, A., Kachwala, Z., Kim, M., Can Seckin, O., Kim, M., Gandhi, S.†, Manikonda, A.†, Pierri, F., Menczer, F. & **Yang, K.-C.**‡. *A Multi-Platform Collection of Social Media Posts about the 2022 U.S. Midterm Elections* in *Proceedings of the International AAAI Conference on Web and Social Media (ICWSM)* **17** (Limassol, Cyprus, 2023), 981–989.

W3. DeVerna, M. R., Pierri, F., Truong, B. T., Bollenbacher, J., Axelrod, D., Loynes, N., Torres-Lugo, C., **Yang, K.-C.**, Menczer, F. & Bryden, J. *CoVaxxy: A Collection of English-Language Twitter Posts About COVID-19 Vaccines* in *Proceedings of the International AAAI Conference on Web and Social Media (ICWSM)* **15** (Virtual, 2021), 992–999.

W4. **Yang, K.-C.**, Aronson, B. & Ahn, Y.-Y. BiRank: Fast and Flexible Ranking on Bipartite Networks with R and Python. *Journal of Open Source Software* **5,** 2315 (2020).

W5. **Yang, K.-C.**‡, Torres-Lugo, C. & Menczer, F. *Prevalence of Low-Credibility Information on Twitter During the COVID-19 Outbreak* in *Proceedings of the ICWSM International Workshop on Cyber Social Threats (CySoc)* (Virtual, 2020).

W6. Hui, P.-M., **Yang, K.-C.**, Torres-Lugo, C. & Menczer, F. *BotSlayer: DIY Real-Time Influence Campaign Detection* in *Proceedings of the International AAAI Conference on Web and Social Media (ICWSM)* **14** (Virtual, 2020), 980–982.

W7. **Yang, K.-C.**‡, Hui, P.-M. & Menczer, F. *Bot Electioneering Volume: Visualizing Social Bot Activity During Elections* in *Companion Proceedings of The 2019 World Wide Web Conference (WWW)* (San Francisco, CA, USA, 2019), 214–217.

W8. Hui, P.-M., **Yang, K.-C.**, Torres-Lugo, C., Monroe, Z., McCarty, M., Serrette, B., Pentchev, V. & Menczer, F. BotSlayer: real-time detection of bot amplification on Twitter. *Journal of Open Source Software* **4,** 1706 (2019).

Under Review (with manuscripts to share)

R1. **Yang, K.-C.**‡. News Source Citing Patterns in AI Search Systems. *Preprint arXiv:2507.05301* (2025).

R2. DeVerna, M. R., **Yang, K.-C.**, Yan, H. & Menczer, F. Large Language Models Require Curated Context for Reliable Political Fact-Checking – Even with Reasoning and Web Search. *Preprint arXiv:2511.18749* (2025).

R3. Mimizuka, K., Brown, M. A., **Yang, K.-C.** & Lukito, J. Post-Post-API Age: Studying Digital Platforms in Scant Data Access Times. *Preprint arXiv:2505.09877* (2025).

R4. Xue, L.†, **Yang, K.-C.**, Cui, P.-B. & Di, Z. Network localization strength regulates innovation diffusion with macro-level social influence. *Preprint arXiv: 2301.00151* (2023).

Book Chapters

B1. **Yang, K.-C.**‡, Varol, O., Nwala, A. C., Sayyadiharikandeh, M., Ferrara, E., Flammini, A. & Menczer, F. *Forthcoming in Handbook of Computational Social Science* (ed Yasseri, T.) chap. Social Bots: Detection and Challenges (Edward Elgar Publishing Ltd, 2024).

B2. Yan, H. & **Yang, K.-C.**‡. *Handbook of Critical Studies of Artificial Intelligence* (ed Lindgren, S.) chap. The landscape of social bot research: a critical appraisal. `https://doi.org/10.4337/9781803928562.00073` (Edward Elgar Publishing Ltd, 2023).

Other Works

O1. Brown, M., Lukito, J. & **Yang, K.-C.** *What Does CrowdTangle's Demise Signal for Data Access Under the DSA?* Tech Policy Press (https://www.techpolicy.press/what-does-crowdtangles-demise-signal-for-data-access-under-the-dsa). 2024.

O2. **Yang, K.-C.** *Social Media Bots: Detection, Characterization, and Human Perception* PhD thesis (Indiana University, July 2023).

O3. **Yang, K.-C.** & Menczer, F. *How many bots are on Twitter? The question is difficult to answer and misses the point* The Conversation (https://theconversation.com/how-many-bots-are-on-twitter-the-question-is-difficult-to-answer-and-misses-the-point-183425). 2022.

Tools

AI and Information Ecosystem

- LLM Domain Classification Dashboard [C1]: evaluate LLMs' ability to recognize and classify news domains

Observatory on Social Media (OSoMe)

- Botometer® [J11, C5, C6, J26]: bot detection tools; used by Elon Musk's team in his dispute with Twitter (via CNN, BBC, and Yahoo! Finance)
- Midterm 2022 dashboard [W2]: US 2022 midterm elections Twitter discussion (no longer maintained)
- CoVaxxy [W3]: dashboard for COVID-19 vaccine Twitter discussion (no longer maintained)

Network Science

- Persona2vec (GitHub) [J22]: multi-role representations embedding for networks
- BiRank (GitHub, PyPI, CRAN) [W4]: bipartite network PageRank

Others

- DomainDemo (Website, GitHub) [J1]: explore audience demographics of 129k+ domains
- vMFD (GitHub, PyPI) [J3]: inferring moral appeals from text
- Scicolor (Website, GitHub): color schemes for scientific visualization

Grants		
Institute for Humane Studies Grant ($5,000). Role: Co-PI.		2024
OpenAI Researcher Access Program ($1,000 worth of API credits). Role: PI.		2024
Northeastern University Staff development funds from Deans office ($1,000). Role: PI.		2024
Northeastern University Internet Democracy Initiative Seed Grant ($5,000). Role: PI.		2024
Northeastern University Lab for Text, Maps & Networks seed grant ($500). Role: PI.		2024
Civic Health Project LLM Applications for Civic Health Grant, phase I ($5,000). Role: Co-PI.		2024

Honors		
Awards	ICWSM 2025 Best Paper Honorable Mention	2025
	IU Distinguished Ph.D. Dissertation Award runner-up	2024
	Selected for Rising Scholars 2023, MIT	2023
	IU Informatics Luddy Graduate Research Award ($500)	2023
	IU Luddy Dean's Office Conference Travel Award ($1,000)	2023
	IU GISA Conference Travel Award ($300)	2022
	Best Reviewer Award at AAAI ICWSM 2022	2022
	Selected for Future Leaders Summit 2022, University of Michigan	2022
	IU Luddy Outstanding Research Award ($500)	2021
	IU School of Public Health Big Idea Challenge ($250)	2020

IU Informatics Ph.D. Student Conference Travel Award ($1,000)   2020
IU GISA Conference Travel Award ($700)   2019
IU Informatics Ph.D. Student Conference Travel Award ($1,000)   2019
NSF Research Trainee scholarship in Complex Networks and Systems ($5,000)   2018

PRESENTATIONS **Tutorials and Demos**

- Beyond APIs: Collecting Web Data for Research using the National Internet Observatory
  ICA 2025 (Denver, US)   Jun. 2025
  WebSci 2025 (New Brunswick, US)   May. 2025
- Exploring emerging social media: acquiring, processing, and visualizing data with Python and OSoMe web tools
  IC^{2}S^2 2024 (Philadelphia, US)   Jul. 2024
- Identifying social media manipulation with OSoMe tools
  Computation + Journalism Conference – C+J 2022 (Virtual)   Jun. 2022
  IC^{2}S^2 2020 (Virtual)   Jul. 2020
- Introduction to Botometer®
  Visit by former Dominican Republic president Leonel Fernández (Bloomington, US) Apr. 2022
  Invited demo at the Learning Informatics Lab, University of Minnesota (Virtual) Mar. 2022
  Knight Research Network Tool Demonstration Day (Virtual)   Oct. 2021
- Fast and flexible ranking on bipartite networks with Python and R
  Indiana University Network Institute workshop series (Bloomington, US)   Nov. 2021

Talks

- New gatekeepers: news source citation patterns of AI-powered search [R1, C1]
  Invited talk at the Binghamton Center of Complex Systems seminar (Binghamton, NY, US)
                                                                               Sep. 2025
- AI transforming the information ecosystem: the good, the bad, and the ugly [C1, J5–J7]
  Invited talk at the Impact of AI on (Mis)Information workshop at UPenn (Philadelphia, PA, US)
                                                                               Apr. 2025
  Invited talk at the Institute of Data Science seminar for the Data Justice Lab, Texas A&M (College Station, TX, US)   Jan. 2025
- Accuracy and political bias of news source credibility ratings by large language models [C1]
  WebSci 2025 (New Brunswick, US)   May. 2025
  NULab Spring Conference 2025 (Boston, US)   Apr. 2025
  IC^{2}S^2 2024 (Philadelphia, PA, US)   Jul. 2024
  Trust and Safety Research Conference 2023 (Palo Alto, CA, US)   Aug. 2023
- Characteristics and prevalence of fake social media profiles with AI-generated faces [J6]
  Trust and Safety Research Conference 2024 (Palo Alto, CA, US)   Aug. 2024
- Anatomy of AI-powered malicious social bots [J5]
  IC^{2}S^2 2024 (Philadelphia, PA, US)   Jul. 2024
  ICWSM 2024 (Buffalo, NY, US)   Jun. 2024
  Communication Horizons Conference at UC Davis (Davis, CA, US)   May 2024
- Fantastic bots and how to find them [J9, J11, J20, J21, W5, C5, C6, J26]
  Invited talk at Intelligent and Computational Communication Salon, Beijing Normal University (Virtual)   Jul. 2024
  Invited talk at Manning College of Information & Computer Sciences, University of Massachusetts Amherst (Amherst, MA, US)   Nov. 2023
  Invited talk at Yangtze Delta Region Institute (Huzhou), University of Electronic Science and

Technology of China (Huzhou, China)   Aug. 2023

Invited talk at International Academic Center of Complex Systems, Beijing Normal University –
Zhuhai (Zhuhai, China)   Jul. 2023

Invited talk at Summer Institutes in Computational Social Science 2023 – Beijing (Beijing, China)
                                                                              Jul. 2023

Invited talk at New Media Research Center, Beijing Normal University (Beijing, China)
                                                                              Jul. 2023

Invited talk at Social Computing Group, University of Zurich (Virtual)   Feb. 2023

Invited talk at Computational Methods Research Group, UW-Madison (Virtual)   Feb. 2023

- Dissemination Patterns of Political Fact-Checks on Twitter
  IC^2S^2 2024 (Philadelphia, PA, US)   Jul. 2024

- Revealing localness of news domains through sharing patterns on social media
  Computation + Journalism Conference – C+J 2024 (Boston, MA, US)   Oct. 2024
  Annual Midwest Political Science Association Conference (Chicago, IL, US)   Apr. 2024

- LLMs and cyber social threats: Good, bad, and ugly [C1, J5, J7]
  Rising Scholars Conference at MIT (Cambridge, MA, US)   Oct. 2023
  Invited talk at Workshop on Applications of LLMs in Media (Beijing, China) Jul. 2023
  Invited talk at School of Journalism, Fudan University (Shanghai, China)   Jun. 2023

- Wrestling with the changing API of social media platforms: The case of Botometer
  Post-API Conference (Philadelphia, PA, US)   Oct. 2023

- Artificial intelligence is ineffective and potentially harmful for fact checking [J7]
  Politics and Computational Social Science Conference (Los Angeles, CA, US) Aug. 2023

- The COVID-19 Infodemic: prevalence, adverse actors, and real-world impact [J15, J17, W5]
  2022 INFORMS Annual Meeting (Indianapolis, IN, US)   Oct. 2022
  Invited talk at Computational Social Science Lab at Penn (Virtual)   Jun. 2022
  Future Leaders Summit 2022 (Ann Arbor, MI, US)   Apr. 2022

- The COVID-19 Infodemic: Twitter versus Facebook [J17]
  Social Media Lab Guest Speaker Series (Virtual)   Oct. 2021
  IC^2S^2 2021 (Virtual)   Jul. 2021
  NetSci 2021 (Virtual)   Jul. 2021
  Computation + Journalism Symposium – C+J 2021 (Virtual)   Feb. 2021
  The 3rd North American Social Networks Conference – NASN 2021 (Virtual)   Jan. 2021

- Bipartite network centrality comparison: A study of opioid doctor shopping [J10]
  IC^2S^2 2020 (Virtual)   Jul. 2020

- Prevalence of low-credibility information on Twitter during the COVID-19 outbreak [W5]
  CySoc 2020 (Virtual)   Jun. 2020

- BotometerLite [C5]
  IC^2S^2 2020 (Virtual)   Jul. 2020
  AAAI 2020 (New York, NY, US)   Feb. 2020

- Bot Electioneering Volume [W7]
  CyberSafety 2019 (San Francisco, CA, US)   May 2019

WORK
EXPERIENCE

Analysis Group, MA, US

Consultant for the trial of Elon Musk vs. Twitter   Aug. 2022 – Oct. 2022

TikTok Inc. (ByteDance), CA, US

Security engineering intern   May 2021 – Aug. 2021

TEACHING
EXPERIENCE

Binghamton University, NY, US

| CS-415/515 Social Media Data Science Pipeline | Fall 2025 |

Indiana University, IN, US

| INFO-T100 Social Media Manipulation 101 (guest lecturer) | Fall 2022 |
| INFO-I590 Applied Data Science (associate instructor) | Fall 2017, Spring 2018 |

PhD students:

• Xuanchi Li (Binghamton University)	Fall 2025 –
• Smriti Janaswamy (Binghamton University)	Fall 2025 –
• Claire Dekker (Binghamton University)	Fall 2025 –

PhD committees:

• Fatemeh Tahmasbi (Binghamton University)	Fall 2025 –

PhD qualifying committees:

• Hrudayangam Mehta (Binghamton University)	Fall 2025 –

Masters students:

• Jay Desai (Binghamton University)	Fall 2025
• Monish Kumar Dhanasekar (Binghamton University)	Fall 2025

Other mentees

• Yuhan Li (PhD, University of Michigan)	Spring 2024 –
• Jason Alexander Huang (Undergraduate, UMass Amherst)	Fall 2023 – Fall 2024
• Priyal Nanda (Undergraduate, UMass Amherst)	Fall 2023 – Fall 2024
• Leyang Xue (PhD, Beijing Normal University)	Summer 2022 –

Research Community Advocate for Open Access to Social Media Data:

- Drafting open letters regarding Twitter and Reddit's decisions to restrict data access
- Conducting survey to gauge the impact of data loss [R3] (cited by court ruling that dismissed Twitter/X's lawsuit against CCDH) and coordinating mutual aids
- Outreaching to news media to express concerns: Reuters, The Verge, TechCrunch, CNN, Tech Policy Press
- Conducting DSA Data Access Audit

Editorial Board Member: Information Processing & Management (25);
Guest Editor: EPJ Data Science: Special Issue on Computational Approaches for Cyber Social Threats;
Conference Organizer: Tutorial chair @ ICWSM26; Publicity chair @ ICWSM24;
Workshop Organizer:

- International Workshop on Cyber Social Threats: CySoc 2025 @ ICWSM25; CySoc 2024 @ ICWSM24; CySoc 2023 @ WebConf23; CySoc 2022 @ ICWSM22;

Journal Reviewer:

- **Interdisciplinary:** Science (25); Nature Computational Science (25); Nature Communications (25); Nature Human Behaviour (24); PNAS (23–25); PNAS Nexus (23); Scientific Reports (22, 23, 25); PLoS ONE (21–24); Royal Society Open Science (22); Journal of the Royal Society Interface (22);
- **Computer/information sciences, data mining:** Nature Machine Intelligence (23, 24); ACM Computing Surveys (23); ACM Digital Threats: Research and Practice (21); ACM Transactions on Information Systems (23); ACM Transactions on Intelligent Systems and Technology (25); AI and Ethics (24); Applied Network Science (24); Behaviour & Information Technology (23); Big Data & Society (21); Computers & Security (21); Computer

networks (24); Decision Support Systems (22); EPJ Data Science (23, 25); Expert Systems With Applications (25); IEEE Internet Computing (21); IEEE Transactions on Knowledge and Data Engineering (21); IEEE Transactions on Network Science and Engineering (23); Information Fusion (25); Information Processing & Management (21, 24, 25); International Journal of Computational Intelligence Systems (25); International Journal of Data Science and Analytics (21); International Journal of Human-Computer Interaction (22, 24); International Journal of Information Technology & Decision Making (21); Journal of Big Data (23, 24); Journal of Computational Social Science (22–24); Journal of Quantitative Description: Digital Media (24); npj Artificial Intelligence (25); Online Social Networks and Media (21–25); PeerJ Computer Science (20, 22, 24); Progress in Artificial Intelligence (23); Transactions on Asian and Low-Resource Language Information Processing (24); Social Network Analysis and Mining (21–24); Social Science Computer Review (24, 25);

- **Social sciences:** New Media & Society (23); HKS Misinformation Review (23–25); Computational Communication Research (25); Communication Methods and Measures (24, 25); Humanities & Social Sciences Communications (21–25); Technology in Society (24); Telematics and Informatics (23); Information, Communication and Society (21, 24); International Communication Gazette (21); International Journal of Communication (25); Journal of Health Communication (23); Political Research Exchange (21); Public Understanding of Science (23); Socius (22); Social Science Computer Review (25);
- **Health:** Journal of Medical Internet Research (22–25); BMC Digital Health (23); Drug and Alcohol Dependence (23); Frontiers in Public Health (22); Health Policy and Technology (25); JMIR Infodemiology (22, 23); JMIR Public Health and Surveillance (22); Vaccine (25);
- **Others:** International Journal of Digital Earth (24); Physical Review E (24);

Conference Reviewer:

- **Computer/information sciences, data mining:** AAAI (24, 25); CSCW (22, 23); CIKM (21–24); ICWSM (20–25); WWW (22–25); WebSci (22–25); FAccT (25); iConference (25);
- **Computational social science:** IC^2S^2 (24, 25); Computation + Journalism Symposium (24); ICA (24);
- **Network science:** Complex Networks (23);

Selected Quotations and Interviews

- **AI and information integrity:** *PolitiFact (Nov. 2024)*; *NBC News (Oct. 2024)*; *Time (Feb. 2024)*;
- **Social media in general:** *Reuters (Nov. 2023)*; *Reuters (Jul. 2023)*; *The Verge (May 2023)*; *TechCrunch (Feb. 2023)*; *CNN (Feb. 2023)*; *Tech Policy Press (Feb. 2023)*;
- **Social bots and other inauthentic actors on social media:** *NBC News (Jul. 2024)*; *Sherwood News (Jul. 2024)*; *Tortoise (Feb. 2024)*; *Business Insider (Aug. 2023)*; *WIRED (Sep. 2022)*; *WIRED (Sep. 2022)*; *BBC (Aug. 2022)*; *Ars Technica (Aug. 2022)*; *Yahoo! Finance (Aug. 2022)*; *CNN (Aug. 2022)*; *Yahoo! Finance (Aug. 2022)*; *CNN (Jun. 2022)*; *The Wall Street Journal (Jun. 2022)*; *The Washington Post (May 2022)*; *Politico (May 2022)*; *Business Insider (May 2022)*; *Yahoo! News (May 2022)*; *Spectrum News (Apr. 2022)*;
- **Online misinformation:** *WISH-TV (Sep. 2022)*; *IEEE Spectrum (Jul. 2020)*;

Selected Media Coverage of My Works

- **AI as information curator [R1, C1]:** *Entrepreneur (Jul. 2025)*; *Forbes (Nov. 2024)*; *RStreet (Aug. 2023)*;
- **AI-powered inauthentic social media accounts [J5, J6]:** *MIT Technology Review (Mar. 2024)*; *IEEE Spectrum (Feb. 2024)*; *PolitiFact (Dec. 2023)*; *Publico (Dec. 2023)*; *Wired (Oct. 2023)*; *Business Insider (Aug. 2023)*; *Breitbart (Aug. 2023)*; *New York Post (Aug. 2023)*; *Wired (Aug. 2023)*; *Mashable (Aug. 2023)*; *Business Insider (Aug. 2023)*; *MIT Technology Review*

(Aug. 2023); *Tech Policy Press (Aug. 2023)*;

- **Botometer®** [C6, J26] **& BotAmp:** *Daily Finland (Oct. 2024)*; *SVT Nyheter (Sep. 2024)*; *Forbes (Aug. 2023)*; *The Washington Post (Jun. 2023)*; *Business Insider (May 2023)*; *i (May 2023)*; *The Hill (May 2023)*; *Vice (Apr. 2023)*; *PEN America Mar. 2023*; *ABC Action News (Jan. 2023)*; *Poder360 (Jan. 2023)*; *Newsweek (Dec. 2022)*; *Business Insider (Nov. 2022)*; *The Daily Star (Nov. 2022)*; *USA Today (Oct. 2022)*; *Daily Maverick (Oct. 2022)*; *CNN (Oct. 2022)*; *The Washington Times (Sep. 2022)*; *The Economic Times (Sep. 2022)*; *CNN (Sep. 2022)*; *Quotidiano Nazionale (Aug. 2022)*; *The Guardian (Aug. 2022)*; *The National Interest (Aug. 2022)*; *The Verge (Aug. 2022)*; *Yahoo! Finance (Aug. 2022)*; *CNN (Aug. 2022)*; *CNBC (Aug. 2022)*; *Washington Examiner (Aug. 2022)*; *Engadget (Aug. 2022)*; *The Washington Post (Aug. 2022)*; *The New York Times (Aug. 2022)*; *Inc. Magazine (Aug. 2022)*; *Newsweek (Aug. 2022)*; *Snopes (Jul. 2022)*; *USA Today (Jun. 2022)*; *Slate (Jun. 2022)*; *Forbes (Jun. 2022)*; *Wired (May 2022)*; *The Washington Post (May 2022)*; *Los Angeles Times (Apr. 2022)*;

- **CoVaxxy** [J8, W3]**:** *Rolling Stone (Nov. 2024)*; *AP News (Nov. 2024)*; *AP News (Oct. 2023)*; *Washington Examiner (Jun. 2023)*; *The New York Times (May 2022)*; *AP News (Dec. 2021)*; *USA Today (Mar. 2021)*;

- **Online misinformation is linked to early COVID-19 vaccination hesitancy and refusal** [J15]**:** *ilpost (Nov. 2023)*; *The Hill (Feb. 2023)*; *Global Citizen (Aug. 2022)*; *Medical News Today (Aug. 2022)*; *Time (May 2022)*; *News-Medical (May 2022)*; *Tech Policy Press (Apr. 2022)*; *Slate (Apr. 2022)*;

- **Neutral bots probe political bias on social media** [J20]**:** *The Hill (Feb. 2023)*; *NBC News (Apr. 2022)*; *Metro (Apr. 2022)*; *Rolling Stone (Apr. 2022)*;

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