

# Kaicheng Yang

---

CONTACT **Luddy School of Informatics, Computing, and Engineering** **yang3kc@gmail.com**  
INFORMATION **Indiana University Bloomington**  
1015 E. 11th Street  
Bloomington, IN 47408

EDUCATION Ph.D., Informatics, Indiana University Jun. 2023  
M.S., Theoretical Physics, Lanzhou University (China) Jun. 2017  
B.S., Theoretical Physics, Lanzhou University (China) Jun. 2014

## PUBLICATIONS **Journal Articles**

- J1. 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).
- J2. **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).
- J3. **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).
- J4. **Yang, K.-C.**, Hui, P.-M. & Menczer, F. How Twitter data sampling biases U.S. voter behavior characterizations. *PeerJ Computer Science* **8**, e1025 (2022).
- J5. 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).
- J6. 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).
- J7. 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).
- J8. **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).
- J9. **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).
- J10. 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).
- J11. Wen, C., Pacheco, D., **Yang, K.-C.** & Menczer, F. Neutral bots probe political bias on social media. *Nature Communications* **12**, 5580 (2021).
- J12. Yan, H., **Yang, K.-C.**, Menczer, F. & Shanahan, J. Asymmetrical Perceptions of Partisan Political Bots. *New Media & Society* **23**, 3016–3037 (2021).

- J13. 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).
- J14. **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).
- J15. 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).
- J16. 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).

#### Peer-reviewed Conference Proceedings

- C1. 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.
- C2. **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.
- C3. 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.

#### PRESENTATIONS Tutorials and Demos

- Identifying Social Media Manipulation with OSoMe Tools  
*Computation + Journalism Conference – C+J 2022 (Virtual)* Jun. 2022  
*IC<sup>2</sup>S<sup>2</sup> 2020 (Virtual)* Jul. 2020
- Introduction to **Botometer**<sup>®</sup>  
*Visit by former Dominican Republic president Leonel Fernández (Bloomington, USA)* 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, USA)* Nov. 2021

#### Talks

- Fantastic bots and how to find them [J3, 0, J11, J12, 0, C2, C3, J14]  
*Invited talk at Social Computing Group, University of Zurich (Virtual)* Feb. 2023  
*Invited talk at Computational Methods Research Group, UW-Madison (Virtual)* Feb. 2023
- The COVID-19 Infodemic: prevalence, adverse actors, and real-world impact [J7, J9, 0]  
*2022 INFORMS Annual Meeting (Indianapolis, USA)* Oct. 2022  
*Invited talk at Computational Social Science Lab at Penn (Virtual)* Jun. 2022  
*Future Leaders Summit 2022 (Ann Arbor, USA)* Apr. 2022
- The COVID-19 Infodemic: Twitter versus Facebook [J9]  
*Social Media Lab Guest Speaker Series (Virtual)* Oct. 2021  
*IC<sup>2</sup>S<sup>2</sup> 2021 (Virtual)* Jul. 2021  
*NetSci 2021 (Virtual)* Jul. 2021

<i>Computation + Journalism Symposium – C+J 2021 (Virtual)</i>	Feb. 2021
<i>The 3rd North American Social Networks Conference – NASN 2021 (Virtual)</i>	Jan. 2021
• Bipartite Network Centrality Comparison: A Study of Opioid Doctor Shopping [J2] <i>IC<sup>2</sup>S<sup>2</sup> 2020 (Virtual)</i>	Jul. 2020
• Prevalence of Low-Credibility Information on Twitter During the COVID-19 Outbreak [0] <i>CySoc 2020 (Virtual)</i>	Jun. 2020
• BotometerLite [C2] <i>IC<sup>2</sup>S<sup>2</sup> 2020 (Virtual)</i>	Jul. 2020
<i>AAAI 2020 (New York, USA)</i>	Feb. 2020

## SERVICE

**Workshop Organizer:** *International Workshop on Cyber Social Threats 2022 (CySoc); International Workshop on Cyber Social Threats 2023 (CySoc);*

**Conference Reviewer:** CSCW (22, 23); CIKM (21,22); ICWSM (20-22); WebSci (22); WebConf (22);

**Journal Reviewer:** Big Data & Society (21); BMC Digital Health (23); Decision Support Systems (22); Humanities & Social Sciences Communications (21-23); IEEE Transactions on Knowledge and Data Engineering (21); Information, Communication and Society (21); Information Processing & Management (21); Journal of Computational Social Science (22); Journal of Medical Internet Research (22, 23); Journal of the Royal Society Interface (22); Online Social Networks and Media (21, 22); PLoS ONE (21, 22); PNAS (23); Scientific Reports (22); Social Network Analysis and Mining (21, 22); etc.

## IN THE PRESS

### Selected Quotations and Interviews

*TechCrunch (Feb. 2023); CNN (Feb. 2023); Tech Policy Press (Feb. 2023); WIRED (Sep. 2022); WIRED (Sep. 2022); BBC (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);*

Last updated: June 11, 2023