

Curriculum Vitae

Hanjia Lyu

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Research Interest

Data Mining, Computational Social Science, Health Informatics

Education

2021 - Now	University of Rochester, Ph.D. in Computer Science
2019 - 2020	University of Rochester, M.S. in Data Science
2013 - 2017	Fudan University, B.A. in Economics

Recognitions

- 2024 Google PhD Fellowship
- 2024 Graduate Student Supplemental Professional Development Funding Award
- 2024 NSF Student Travel Award, CIKM 2024
- 2024 Student Travel Award, MIPR 2024
- 2024 Student Travel Award, ICWSM 2024
- 2024 Student Travel Award, ICLR 2024
- 2023 Donald M. and Janet C. Barnard Fellowship
- 2022 Snap Research Fellowship Semi-Finalist
- 2021 Graduate Student Scholarship, SBP-BRiMS 2021
- 2020 First place in the UR Biomedical Data Science Hackathon

Selected Publications

[For a complete list of my publications, please visit [my homepage](#).]

1. **Hanjia Lyu***, Jinfa Huang*, Daoan Zhang*, Yongsheng Yu*, Xinyi Mou*, Jinsheng Pan, Zhengyuan Yang, Zhongyu Wei, and Jiebo Luo. GPT-4V(ision) as a social media analysis engine. *ACM Transactions on Intelligent Systems and Technology*, 2025. URL <https://arxiv.org/pdf/2311.07547.pdf>
2. Hanqing Zeng*, **Hanjia Lyu***, Diyi Hu, Yinglong Xia, and Jiebo Luo. Mixture of weak & strong experts on graphs. In *The Twelfth International Conference on Learning Representations, ICLR*, Vienna, Austria, May, 2024. URL <https://openreview.net/pdf?id=wYvuY60SdD>
3. **Hanjia Lyu**, Song Jiang, Hanqing Zeng, Yinglong Xia, Qifan Wang, Si Zhang, Ren Chen, Chris Leung, Jiajie Tang, and Jiebo Luo. LLM-Rec: Personalized recommendation via prompting large language models. In *Findings of the Association for Computational Linguistics: NAACL 2024*, Mexico City, Mexico, June 2024. Association for Computational Linguistics. URL <https://aclanthology.org/2024.findings-naacl.39.pdf>
4. **Hanjia Lyu***, Jinsheng Pan*, Zichen Wang*, and Jiebo Luo. Computational assessment of hyperpartisanship in news titles. In *AAAI International Conference on Web and Social Media, ICWSM*, Buffalo, NY, USA, June, 2024. URL <https://arxiv.org/pdf/2301.06270.pdf>

→ Media coverage: *UofR News Center*, *Study Finds*, *ScienceBlog*, *EurekAlert!*

5. **Hanjia Lyu**, Aarsal Imtiaz, Yufei Zhao, and Jiebo Luo. Human behavior in the time of COVID-19: Learning from big data. *Frontiers in Big Data*, 6:1099182, 2023. URL <https://doi.org/10.3389/fdata.2023.1099182>
6. **Hanjia Lyu** and Jiebo Luo. Understanding political polarization via jointly modeling users, connections and multimodal contents on heterogeneous graphs. In *ACM Multimedia Conference, ACM-MM*, Lisbon, Portugal, October, 2022. URL <https://doi.org/10.1145/3503161.3547898>
7. **Hanjia Lyu**, Junda Wang, Wei Wu, Viet Duong, Xiyang Zhang, Timothy D Dye, and Jiebo Luo. Social media study of public opinions on potential COVID-19 vaccines: informing dissent, disparities, and dissemination. *Intelligent medicine*, 2(1):1–12, 2022. URL <https://doi.org/10.1016/j.imed.2021.08.001>
 → Media coverage: *News Medical*
8. **Hanjia Lyu**, Zihe Zheng, and Jiebo Luo. Misinformation versus facts: Understanding the influence of news regarding COVID-19 vaccines on vaccine uptake. *Health Data Science*, 2022. URL <https://doi.org/10.34133/2022/9858292>
 → Media coverage: *Medical Economics, News Medical, News Wise, Medical Xpress*
9. **Hanjia Lyu**, Yangxin Fan, Ziyu Xiong, Mayya Komisarchik, and Jiebo Luo. Understanding public opinion toward the #StopAsianHate movement and the relation with racially motivated hate crimes in the US. *IEEE Transactions on Computational Social Systems*, 2021. URL <https://doi.org/10.1109/TCSS.2021.3136858>
 → Media coverage: *UofR News Center, Rochester Beacon, Futurity*
10. **Hanjia Lyu**, Long Chen, Yu Wang, and Jiebo Luo. Sense and sensibility: Characterizing social media users regarding the use of controversial terms for COVID-19. *IEEE Transactions on Big Data*, 7(6):952–960, 2020. URL <https://doi.org/10.1109/2FTBDATA.2020.2996401>
 → Media coverage: *IEEE Spectrum, Tech Xplore, UofR News Center*

Teaching Experience

Guest Lecturer

University of Rochester CSC 511: Large Language Models Adapting Large Language Models for Domain-Specific Applications	Nov. 2024
Fudan University MI620017: Insurance Study Generative Artificial Intelligence in Finance and Insurance	Nov. 2023
University of Rochester CSC 440: Data Mining Towards Data Intelligence: Unveiling Insights through Data Mining	Sep. 2023

Teaching Assistant

University of Rochester CSC 480: Computer Models & Limitations	Spring 2023
CSC 486: Computational Complexity	Spring 2023
CSC 440: Data Mining	Fall 2022
CSC 446: Machine Learning	Spring 2022
CSC 440: Data Mining	Fall 2021
CSC 440: Data Mining	Fall 2020

Industry Experience

Meta Platforms, Inc. Research Scientist Intern (Part-Time) Mentors: Dr. Yinglong Xia	Remote Oct. 2024 - Jan. 2025
Meta Platforms, Inc. Research Scientist Intern (Full-Time) Mentors: Dr. Yinglong Xia	Menlo Park, CA June - Oct. 2024
Meta Platforms, Inc. Research Scientist Intern (Full-Time) Mentors: Dr. Hanqing Zeng, Dr. Yinglong Xia	Menlo Park, CA Apr. - Aug. 2023
Meta Platforms, Inc. Research Scientist Intern (Full-Time) Mentors: Fiona Tang, Dr. Ren Chen, and Dr. Yinglong Xia	Menlo Park, CA May - Sep. 2022
Wyze Labs, Inc. Research Scientist Intern (Part-Time) Mentors: Dr. Mohammad Mahdi Kamani, Dr. Zhongwei Cheng, and Dr. Lin Chen	Remote Jan. - May 2022

Invited Talks

GPT-4V as A Social Media Analysis Engine, Synchronous Reading Club	Jan. 2024
Generative Artificial Intelligence in Finance and Insurance, Fudan University	Nov. 2023
DEFIRST Reading Group at Mila x Vector Institute, Virtual	Oct. 2023
Western New York Image and Signal Processing Workshop, Rochester Institute of Technology	Nov. 2022
Great Lakes Science Boot Camp for Librarians, Virtual	June 2022
China Research Workshops at the Fudan-UC Center on Contemporary China, UCSD	May 2022
InsurTech Innovation: UK & China as Hotspots of the Global World, Virtual	Apr. 2022
CSUG Research Panel, University of Rochester	Oct. 2021
Experience Rochester, Virtual	Sep. 2020

Service to the Research Community

Organizing Committee

1st Multimodal Learning for Social Good (MML4SG) workshop at ICME 2024

1st Visual-Language Alignment in Text-Guided Multi-Modal Generation (TMMG) workshop at ICME 2024

Area Chair

EMNLP (2024)

NAACL (2025)

ACL Rolling Review (since June 2024)

Editor for Journals

Frontiers in Public Health

Program Committee/Reviewer for Conferences

AAAI (2023-2025)

ACL (2024)

ACML (2024)

ACMMM (2023-2024)

AISTATS (2025)

ASONAM (2023-2024)

BigData (2024)

CIKM (2022-2024)

EMNLP (2023)

ICDM (2021, 2023)

ICLR (2025)

ICLS (2022)

ICME (2024)

ICPR (2024)
ICWSM (2021-2025)
IJCNLP-AACL (2023)
KDD (2023-2025)
NeurIPS (2024)
NeurIPS Datasets and Benchmarks (2023-2024)
SDM (2024)
WSDM (2024-2025)
WWW (2022)

Reviewer for Journals

Machine Learning/Artificial Intelligence

ACM Transactions on Information Systems
ACM Transactions on Interactive Intelligent Systems
IEEE Transactions on Knowledge and Data Engineering (TKDE)
IEEE Transactions on Multimedia (TMM)
IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)

Data Science/Computational Social Science

Journal of Big Data
Telematics and Informatics

Health Informatics

BMC Public Health
Frontiers in Psychiatry
Frontiers in Psychology

Multidisciplinary

PLOS ONE
SAGE Open
Scientific Reports