

Curriculum Vitae

Hanjia Lyu

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Research Interest

Data Science, Computational Social Science, Health Informatics

Education

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| 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**, Jiebo Luo, Jian Kang, and Allison Koenecke. Characterizing bias: Benchmarking large language models in simplified versus traditional Chinese. In *ACM Conference on Fairness, Accountability, and Transparency, FAccT*, Athens, Greece, June, 2025. URL <https://doi.org/10.1145/3715275.3732182>

→ *Will be presented at: FAccT 2025, IC2S2 2025 (Parallel Talk)*
2. **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://doi.org/10.1145/3709005>

→ *Presented at: Synchronous Reading Club*
3. 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>

→ *Presented at: ICLR 2024*
4. **Hanjia Lyu**, Song Jiang, Hanqing Zeng, Yinglong Xia, Qifan Wang, Si Zhang, Ren Chen, Chris Leung, Jiajie Tang, and Jiebo Luo. LLM-Rec: Personalized recommenda-

tion 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>

→ Presented at: *NAACL 2024, DEFIRST Reading Group at Mila x Vector Institute*

5. **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!*

→ Presented at: *ICWSM 2024*

6. **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>

7. **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>

→ Presented at: *ACM-MM 2022, Western New York Image and Signal Processing Workshop*

8. **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*

→ Presented at: *Great Lakes Science Boot Camp for Librarians*

9. **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*

→ Presented at: *Great Lakes Science Boot Camp for Librarians, CSUG Research Panel*

10. **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*

11. **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*

→ Presented at: *Experience Rochester, CSUG Research Panel*

Teaching Experience

Guest Lecturer

University of Rochester Nov. 2024

CSC 511: Large Language Models

Adapting Large Language Models for Domain-Specific Applications

Fudan University Nov. 2023

MI620017: Insurance Study

Generative Artificial Intelligence in Finance and Insurance

University of Rochester Sep. 2023

CSC 440: Data Mining

Towards Data Intelligence: Unveiling Insights through Data Mining

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

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| Snap, Inc. Research Scientist Intern (Part-Time) Mentors: Dr. Jian Wang | Remote May 2025 - Present |
| 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

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| 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

ACM Transactions on Multimedia Computing, Communications, and Applications

– Special Issue on Multimodal Video Understanding and Analysis with Foundation Models

Program Committee/Reviewer for Conferences

AAAI (2023-2025)

ACL (2024-2025)

ACML (2024)

ACMMM (2023-2025)

AISTATS (2025)

ASONAM (2023-2024)

BigData (2024)

CIKM (2022-2024)

CVPR (2025)

EMNLP (2023)

ICDM (2021, 2023)
ICLR (2025)
ICLS (2022)
ICME (2024, 2025)
ICML (2025)
ICPR (2024)
ICWSM (2021-2025)
IJCNLP-AACL (2023)
KDD (2023-2025)
NeurIPS (2024, 2025)
NeurIPS Datasets and Benchmarks (2023-2024)
RecSys (2025)
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