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	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**. Towards advancing text-based user and item representation in personalized recommendation. In *Proceedings of the 33rd ACM International Conference on Information and Knowledge Management*, CIKM '24, New York, NY, USA, 2024
- 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
 - $\rightarrow \textit{Media coverage: UofR News Center, Study Finds, ScienceBlog, EurekAlert!}$
- 5. **Hanjia Lyu***, Weihong Qi*, Zhongyu Wei, and Jiebo Luo. Human vs. LMMs: Exploring the discrepancy in emoji interpretation and usage in digital communication. In *AAAI International Conference on Web and Social Media, ICWSM*, Buffalo, NY, USA, June, 2024. URL https://arxiv.org/pdf/2401.08212.pdf

- 6. **Hanjia Lyu**, Arsal 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, Potugal, October, 2022. URL https://doi.org/10.1145/3503161.3547898
- 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
 - \rightarrow Media coverage: News Medical
- 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

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

CSC 440: Data Mining

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

Fall 2020

Industry Experience

Meta Platforms, Inc.	Menlo Park, CA
Research Scientist Intern	June - Oct. 2024
Mentors: Dr. Yinglong Xia	

Meta Platforms, Inc.	Menlo Park, CA
Research Scientist Intern	Apr Aug. 2023

Mentors: Dr. Hanqing Zeng, Dr. Yinglong Xia

Meta Platforms, Inc.Menlo Park, CAResearch Scientist InternMay - Sep. 2022

Mentors: Fiona Tang, Dr. Ren Chen, and Dr. Yinglong Xia

Wyze Labs, Inc.

Research Scientist Intern

Kirkland, WA

Jan. - May 2022

Mentors: Dr. Mohammad Mahdi Kamani, Dr. Zhongwei Cheng, and

Dr. Lin Chen

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

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

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

Area Chair

EMNLP (2024)

Editor for Journals

Frontiers in Public Health

Program Committee/Reviewer for Conferences

AAAI (2023-2025)

ACL (2024)

ACML (2024)

ACMMM (2023-2024)

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

TKDE

TMM

TPAMI