

Yanbang Wang

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Google Scholar

EDUCATION

- 2021- Ph.D. in Computer Science
Cornell University, Ithaca, NY
Advisor: Jon Kleinberg
- 2019-21 M.S. in Computer Science
Stanford University, Stanford, CA
Advisor: Jure Leskovec
- 2015-19 B.S. in Computer Science, Mathematics
Hong Kong University of Science and Technology, Hong Kong, Hong Kong

PROFESSIONAL EXPERIENCE

- 2024 Meta AI, Research Intern & Part-time Student Researcher
with Yanhong Wu
Negative sampling in graph learning for recommendations with implicit feedback
- 2023 Microsoft Research, Research Intern
with Jonathan Larson
Anomalous detection in authentication events in communication networks
- 2018 MIT CSAIL, Visiting Student Researcher
with Una-May O'Reilly
Large-scale modeling and analysis of human learning behaviors

PUBLICATIONS

(* denotes equal contribution)

PEER-REVIEWED CONFERENCE PUBLICATIONS

- [C.1] **Yanbang Wang**, Jon Kleinberg. [From Graphs to Hypergraphs: Hypergraph Projection and its Reconstruction](#). Proceedings of the 12th International Conference on Learning Representations (**ICLR**), 2024.
- [C.2] **Yanbang Wang**, Hejie Cui, Jon Kleinberg. [Microstructures and Accuracy of Graph Recall by Large Language Models](#). Advances in Neural Information Processing Systems (**NeurIPS**) 38, 2024.
- [C.3] **Yanbang Wang**, Karl Hallgren, Jonathan Larson. [A Graph-based Framework for Reducing False Positives in Authentication Alerts in Security Systems](#). Companion Proceedings of the ACM Web Conference (**WebConf**), 2024 .
- [C.4] **Yanbang Wang**, Jon Kleinberg. [On the Relationship Between Relevance and Conflict in Online Social Link Recommendations](#). Advances in Neural Information Processing Systems (**NeurIPS**) 37, 2023.
- [C.5] Haoteng Yin, Muhan Zhang, **Yanbang Wang**, Jianguo Wang, Pan Li. [Algorithm and system co-design for efficient subgraph-based graph representation learning](#). Proceedings of the VLDB Endowment (**VLDB**), 2022.

- [C.6] **Yanbang Wang**, Yen-Yu Chang, Yunyu Liu, Jure Leskovec, Pan Li. [Inductive Representation Learning in Temporal Networks via Causal Anonymous Walks](#). Proceedings of the 9th International Conference on Learning Representations (**ICLR**), 2021.
- [C.7] **Yanbang Wang***, Pan Li*, Chongyang Bai, Jure Leskovec. [TEDIC: Neural Modeling of Behavioral Patterns in Dynamic Social Interaction Networks](#). Proceedings of the ACM Web Conference (**WebConf**), 2021 .
- [C.8] Pan Li, **Yanbang Wang**, Hongwei Wang, Jure Leskovec. [Distance Encoding: Design Provably More Powerful Neural Networks for Graph Representation Learning](#). Advances in Neural Information Processing Systems (**NeurIPS**) 34, 2020.
- [C.9] **Yanbang Wang**, Nancy Law, Erik Hemberg, Una-May O'Reilly. [Using Detailed Access Trajectories for Learning Behavior Analysis](#). Proceedings of the 9th International Conference on Learning Analytics & Knowledge (**LAK**), 2019.
- [C.10] Mucong Ding, **Yanbang Wang**, Erik Hemberg, Una-May O'Reilly. [Transfer Learning using Representation Learning in Massive Open Online Courses](#). Proceedings of the 9th International Conference on Learning Analytics & Knowledge (**LAK**), 2019.

PEER-REVIEWED JOURNAL PUBLICATIONS

- [J.1] Haipeng Zeng, Xinhuan Shu, **Yanbang Wang**, Yong Wang, Liguang Zhang, Ting-Chuen Pong, Huamin Qu. [EmotionCues: Emotion-Oriented Visual Summarization of Classroom Videos](#). IEEE Transactions on Visualization and Computer Graphics (**TVCG**), 2020.

EXTENDED ABSTRACTS AND WORKSHOP PAPERS

- [W.1] **Yanbang Wang**, Hejie Cui, Jon Kleinberg. Network Recall by Large Language Models. International Conference on Computational Social Science (**IC2S2**), 2024. *Oral*.
- [W.2] **Yanbang Wang**, Jon Kleinberg. On the Relationship Between Relevance and Conflict in Online Social Link Recommendations. International Conference on Computational Social Science (**IC2S2**), 2024.
- [W.3] Haoteng Yin, **Yanbang Wang**, Pan Li. Revisiting Graph Neural Networks and Distance Encoding in a Practical View. Deep Learning on Graphs: Method and Applications (**AAAI-DLG**), 2021.
- [W.4] **Yanbang Wang**, Pan Li, Chongyang Bai, VS Subrahmanian, Jure Leskovec. Generic Representation Learning for Dynamic Social Interaction. 19th International Workshop on Mining and Learning with Graphs (**KDD-MLG**), 2020.
- [W.5] **Yanbang Wang**, Bijia Chen, Cameron Campbell, A Network-based Method for Estimating Potential for Career Advancement from Incomplete Data. Social Science and History Association Annual Meeting (**SSHA**), 2020.

ACADEMIC SERVICE

ORGANIZER

- 2024 [Learning on Graphs Conference \(LoG 2024\)](#)
 2024 [Workshop: the Second Learning on Graphs Conference New York Meetup \(LoG-NYC 2024\)](#)
 2023 [Workshop: the First Learning on Graphs Conference New York Meetup \(LoG-NYC 2023\)](#)

PROGRAM COMMITTEES / REVIEWER

(ML: Machine Learning; DM: Data Mining; CSS: Computational Social Science)

- ML NeurIPS 2024, NeurIPS 2023, NeurIPS 2022, NeurIPS 2021, ICLR 2024, ICLR 2023, ICLR 2022, ICML 2024, ICML 2023, LoG 2024, LoG2023, LoG2022, GLFrontiers 2024, GLFrontiers 2023, Machine Learning (Springer Nature), Neurocomputing
- DM KDD 2023, SDM 2024, Journal of Big Data
- CSS IC2S2 2024

SELECTED HONORS AND AWARDS

2024	Microsoft Accelerating Foundation Models Research Grant
2024	ICLR Student Travel Award
2023	NeurIPS Student Travel Award
2021	Stanford Graduate with Distinction in Research Honor
2019	HKUST Academic Achievement Medal (highest undergraduate honor, top 1%)
2019	HKUST Outstanding Graduate

TALKS AND PRESENTATIONS

INVITED TALKS

2023	Microsoft Research
2021	Tsinghua University, AI-Time Forum
2021	Tianjin University, College of Intelligence and Computing
2020	UIUC, Data Mining Group (DMG)
2018	MIT CSAIL, Any-scale Learning For All Group (ALFA)

CONFERENCE ORAL PRESENTATIONS

IC2S2'24	On the Relationship Between Relevance and Conflict in Online Social Link Recommendations
IC2S2'24	Network Recall by Large Language Models
SSHA'20	A Network-based Method for Estimating Potential for Career Advancement from Incomplete Data
LAK'19	Transfer Learning using Representation Learning in Massive Online Open Courses
LAK'19	Using Detailed Access Trajectories for Learning Behavior Analysis

MEDIA COVERAGE

IEEE Spectrum	Are Your Students Bored? This AI Could Tell You
NHK TV News	Cutting-edge Technology Research in AI