# Lianghao Xia

Research Assistant Professor, The University of Hong Kong

- **■** Foundation Models **■** Graph Learning **■** Recommendation
- Large Language Models
   Self-Supervised Learning
   Spatio-Temporal Modeling
- https://scholar.google.com/citations?user=fDDjoUEAAAAJ

## **Work & Education Experience**

- Research Assistant Professor, The University of Hong Kong 11/2024 Present
- Postdoctoral Fellow, The University of Hong Kong
  04/2022 11/2024
- Ph.D., South China University of Technology
  o9/2017 12/2021

09/2013 - 06/2017

**Bachelor**, South China University of Technology

#### **Hornors & Awards**

- World's Top 2% Scientists 2024 published by Stanford University
- AI 2000 Most Influential Scholar (2022-2023) by AMiner in Data Mining and Information Retrieval: Rank 4th (Citation-based), Rank 7th (Contribution-based), Rank 2nd (Rising-Star).
- One KDD 2024 Most Influential Papers (Rank 10th / 559 Accepted Papers)
- One WWW 2024 Most Influential Papers (Rank 1st / 405 Accepted Papers)
- Three WWW 2023 Most Influential Papers (Rank 4th, 5th, 10th / 323 Accepted Papers)
- One SIGIR 2023 Most Influential Papers (Rank 12th / 165 Accepted Papers)
- Two KDD 2023 Most Influential Papers (Rank 10th, 11th / 497 Accepted Papers)
- Two SIGIR 2022 Most Influential Papers (Rank 2nd and 3rd / 161 Accepted Papers)
- One SIGIR 2021 Most Influential Papers (Rank 13th / 151 Accepted Papers)
- ACM MM 2024 Best Paper Hornarable Mention Award
- WWW 2023 Best Paper Nomination & Spotlight Paper (Top 16 among 323 Accepted Papers)
- WSDM 2022 Best Paper Nomination & Top-3 Most Cited Paper
- WSDM 2023 Top-1 Most Cited Paper among 123 Accepted Papers
- ICLR 2023 Spotlight Paper (Top 25%)

## **Selected Publications**

- Google scholar citation 4415, with 2520 in 2024, h-index 34, i-10 index 49.
  - [EMNLP'24] L. Xia, B. Kao, and C. Huang
    - "OpenGraph: towards open graph foundation models"

One of the First Graph Foundation Models, GitHub Star 300+

- [WWW'23] L. Xia, C. Huang, C. Huang, T. Yu, and B. Kao
  - "Automated self-supervised learning for recommendation"

Best Paper Nomination & Spotlight Paper (Top 16 / 323), Most Influential Papers (Top 10 / 323)

- [WWW'23] L. Xia, C.Huang, J. Shi, and Y. Xu
  - "Graph-less collaborative filtering"

Top 10% Most-Cited Papers of WWW'2023

- [ICDE'23] L. Xia, Y. Shao, C. Huang, Y. Xu, H. Xu, and J. Pei
  - "Disentangled graph social recommendation"

Top 8% Most-Cited Papers of ICDE'2023

- [SIGIR'22] L. Xia, C. Huang, Y. Xu, J. Zhao, D. Yin, and J. Huang
  - "Hypergraph contrastive collaborative filtering"

Most Influential Papers of SIGIR'2022 (Top 2 / 161)

- [KDD'22] L. Xia, C. Huang, and C. Zhang
  - "Self-supervised hypergraph transformer for recommender systems"

Google Citation 109, Top 7% Most-Cited Papers of KDD'2022

- [TKDE'22] <u>L. Xia</u>, C. Huang, Y. Xu, and J. Pei
  - "Multi-behavior sequential recommendation with temporal graph transformer"

Top 13% Most-Cited Papers of TKDE'2022

- [SIGIR'21] <u>L. Xia</u>, Y. Xu, C. Huang, P. Dai, and L. Bo "Graph meta network for multi-behavior recommendation" Most Influential Papers of SIGIR'2021 (Top 13 / 151)
- [AAAI'21] <u>L. Xia</u>, C. Huang, Y. Xu, P. Dai, X. Zhang, H. Yang, J. Pei, and L. Bo
  "Knowledge-enhanced hierarchical graph transformer network for multi-behavior recommendation"
  Google Citation 210, Top 6% Most-Cited among the 1692 Accepted Papers of AAAI'2021
- [IJCAI'21] L. Xia, C. Huang, Y. Xu, P. Dai, L. Bo, X. Zhang, and T. Chen
  "Spatial-temporal sequential hypergraph network for crime prediction with dynamic multiplex relation learning"

  Top 5% Most-Cited among the 587 Accepted Papers of IJCAI 2021
- [ICDE'21] <u>L. Xia</u>, C. Huang, Y. Xu, P. Dai, M. Lu, and L. Bo
  "Multi-behavior enhanced recommendation with cross-interaction collaborative relation modeling"

  Top 6% Most-Cited Papers of ICDE'2021
- [SIGIR'20] <u>L. Xia</u>, C. Huang, Y. Xu, P. Dai, B. Zhang, and L. B
  "Multiplex behavioral relation learning for recommendation via memory augmented transformer"

  Google Citation 121, Top 12% Most-Cited Papers of SIGIR'2020
- [Under review] Z. Guo, <u>L. Xia</u>, Y. Yu, T. Ao, and C. Huang "LightRAG: simple and fast retrieval-augmented generation" Receives 11.2k GitHub Stars
- [KDD'24] Z. Li, <u>L. Xia</u>, J. Tang, Y. Xu, L. Shi, L. Xia, D. Yin, and C. Huang "UrbanGPT: spatio-temporal large language models"

  Most Influential Papers of KDD'2024 (Top 10 / 559)
- [MM'24] Y. Jiang, <u>L. Xia</u>, W. Wei, D. Luo, K. Lin, and C. Huang "DiffMM: multi-modal diffusion model for recommendation"

  Best Paper Nomination & Honorable Mention Award
- [WWW'24] X. Ren, W. Wei, <u>L. Xia</u>, L. Su, S. Cheng, J. Wang, D. Yin, and C. Huang "Representation learning with large language models for recommendation"

  Most Influential Papers of WWW'2024 (Top 1 /405)
- [SIGIR'23] X. Ren, <u>L. Xia</u>, J. Zhao, D. Yin, and C. Huang "Disentangled contrastive collaborative filtering"

  Most Influential Papers of SIGIR'2023 (Top 12 / 165)
- [WWW'23] W. Wei, C. Huang, <u>L. Xia</u>, and C. Zhang "Multi-modal self-supervised learning for recommendation" Most Influential Papers of WWW'2023 (Top 4 / 323)
- [WWW'23] Y. Yang, C. Huang, <u>L. Xia</u>, C. Huang, D. Luo, and K. Lin "Debiased contrastive learning for sequential recommendation"
   Most Influential Papers of WWW'2023 (Top 5 / 323)
- [ICLR'23] X. Cai, C. Huang, <u>L. Xia</u>, and X. Ren "LightGCL: simple yet effective graph contrastive learning for recommendation" Spotlight Paper (Top 25%), Google Citation 264
- [WSDM'23] M. Chen, C. Huang, <u>L. Xia</u>, W. Wei, Y. Xu, and R. Luo "Heterogeneous graph contrastive learning for recommendation" Most-Cited Papers of WSDM'2023 (Top 1 / 123)
- [KDD'22] Y. Yang, C. Huang, <u>L. Xia</u>, Y. Liang, Y. Yu, and C. Li "Multi-behavior hypergraph-enhanced transformer for sequential recommendation" Google Citation 120, Top 7% Most-Cited Papers of KDD'2022
- [SIGIR'22] Y. Yang, C. Huang, <u>L. Xia</u>, and C. Li
  "Knowledge graph contrastive learning for recommendation"

  Most Influential Papers of SIGIR'2022 (Top 3 / 161)
- [WSDM'22] W. Wei, C. Huang, <u>L. Xia</u>, Y. Xu, J. Zhao, and D. Yin "Contrastive meta learning with behavior multiplicity for recommendation"

  Best Paper Nomination & Most Cited Papers of WSDM'2022 (Top 3 / 159)

### **Services & Tutorials**

- Regular PC Members of Conferences: SIGIR, KDD, WWW, AAAI, NeurIPS, ICLR, ICML, CIKM, SDM
- Reviewer for Journals: TKDE, TBD, TNNLS, TLT, TOIS, TWEB, TKDD, TIST
- **Tutorials** at CIKM'2022, WWW'2024, KDD'2024