Yuchang Zhu (朱裕昌)

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Guangzhou, GuangDong Province - 510006, China

RESEARCH INTERESTS

Large Language Models (LLMs), Multimodal LLMs, Graph Machine Learning, Fairness.

EDUCATION

• **Sun Yat-sen University (SYSU)** — *09/2022 - 06/2026 (Expected)*, Guangzhou, China
Ph.D. in Computer Technology
◦ Advisor: Prof. Liang Chen.
◦ (1) Received 2024 National Scholarships (Top 0.4%); (2) Received First-class Scholarships.

• **South China Agricultural University (SCAU)** — *09/2019 - 06/2021*, Guangzhou, China
M.S. in Vehicle Engineering
◦ Advisor: Prof. Zuoxi Zhao.
◦ (1) Received First-class Scholarships; (2) Published Two Papers in Visual Measurement.

• **South China Agricultural University (SCAU)** — *09/2015 - 06/2019*, Guangzhou, China
B.S. in Packaging Engineering
◦ (1) GPA: 4.05/5.00 (Top 8%); (2) Received First-class Scholarships.

SELECTED PUBLICATIONS
C=CONFERENCE, J=JOURNAL, P=PREPRINT OR UNDER REVIEW

[C.1] **Yuchang Zhu**, Huizhe Zhang, Bingzhe Wu, Jintang Li, Zibin Zheng, Peilin Zhao, Liang Chen, Yatao Bian. **Measuring Diversity in Synthetic Datasets**. *International Conference on Machine Learning (ICML)*, 2025.

[C.2] **Yuchang Zhu**, Jintang Li, Yatao Bian, Zibin Zheng, Liang Chen. **One Fits All: Learning Fair Graph Neural Networks for Various Sensitive Attributes**. *ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD)*, 2024. **[Oral]**

[C.3] **Yuchang Zhu**, Jintang Li, Zibin Zheng, Liang Chen. **Fair Graph Representation Learning via Sensitive Attribute Disentanglement**. *International World Wide Web Conference (WWW)*, 2024. **[Oral]**

[C.4] **Yuchang Zhu**, Jintang Li, Liang Chen, Zibin Zheng. **The devil is in the data: Learning fair graph neural networks via partial knowledge distillation**. *ACM International Conference on Web Search and Data Mining (WSDM)*, 2024.

[J.1] **Yuchang Zhu**, Jintang Li, Liang Chen, Zibin Zheng. **Fairagg: Toward fair graph neural networks via fair aggregation**. *IEEE Transactions on Computational Social Systems (TCSS)*, 2024.

[J.2] **Yuchang Zhu**, Yuan Huang, Yuanhong Li, Zhi Qiu, Zuoxi Zhao. **A smartphone-based six-dof measurement method with marker detector**. *IEEE Transactions on Instrumentation and Measurement (TIM)*, 2022.

[P.1] **Yuchang Zhu**, Huazhen Zhong, Qunshu Lin, Haotong Wei, Xiaolong Sun, Zixuan Yu, Minghao Liu, Zibin Zheng, Liang Chen. **What Matters in LLM-generated Data: Diversity and Its Effect on Model Fine-Tuning**. 2025.

[P.2] **Yuchang Zhu**, Huazhen Zhong, Qichao Wang, Haotong Wei, Xiaolong Sun, Zixuan Yu, Liang Chen, Zibin Zheng. **LLM-generated Data and Its Impact: A Survey**. 2025.

[P.3] **Yuchang Zhu**, Jintang Li, Huizhe Zhang, Liang Chen, Zibin Zheng. **SaGIF: Improving Individual Fairness in Graph Neural Networks via Similarity Encoding**. 2025.

EXPERIENCE

• **Tencent-AI Lab [⊕]** — *03/2024 - 05/2025*, Shenzhen, China
Research Intern
◦ Developed LLM-generated Content Watermark Algorithm.
◦ Investigated on LLM-generated Data Diversity Evaluation and Tokenizer of Multimodal LLMs, Contributed to A Paper Accepted by ICML 2025 ([C.1]).

• **SYSU-School of Computer Science and Engineering [⊕]** — *06/2021 - 09/2022*, Guangzhou, China
Research Assistant
◦ Research on Graph Fairness Learning, Simultaneous Localization and Mapping.

RESEARCH SUMMARY

- **Graph Machine Learning: Graph Fairness Learning** *03/2022 - Present*
  - Explored the Potential Reasons of Graph Unfairness and Achieved Fair Aggregation ([J.1]).
  - Improved the Fairness of Graph Neural Networks (GNNs) under Various Scenarios, Including Unknown Sensitive Attribute ([C.4]) and Multi-Sensitive Attribute ([C.2]).
  - Proposed A Novel Framework to Achieve A Trade-off Between Fairness and Utility in GNNs ([C.3]).
  - Improved the Fairness of GNNs at Individual Level ([P.3]).

- **LLMs and Multimodal LLMs: Trustworthy, Tokenizer** *03/2024 - Present*
  - Proposed A Novel Diversity Evaluation Method for LLM-generated Data ([C.1]).
  - Explored the Impact of LLM-generated Data's Diversity on Next-generation Models ([P.1], [P.2]).
  - Developed A Robust Watermark Method for LLMs to Mitigate Negative Impact of LLM-generated Data.
  - Investigating Semantic-aware Tokenizers of Multimodal LLMs, Balancing Multimodal Understanding and Generation. (**Ongoing Work**)

HONORS AND AWARDS

- 2024 National Scholarship (Top 0.4% nationwide)
- 2021 Excellent Master's Thesis Award, SCAU
- 2019 Excellent Bachelor's Thesis Award, SCAU
- 2019 Excellent Undergraduate Graduate of SCAU (10/550)
- 2015 National Endeavor Scholarship