# Mengzhao Wang

Ph.D. Candidate, Zhejiang University
(+86)13037597306
Hangzhou, China

✉ wmzssy@zju.edu.cn    ⌂ https://mzwang.top

## EXPERIENCE

**Zhejiang University**                                          2022.09 - Now
Ph.D. Candidate

**Zilliz**                                                      2022.05 - 2022.08
Research Engineer Intern

**Zhejiang Lab**                                                2021.09 - 2022.09
R&D Engineer Intern

**Hangzhou Dianzi University**                                  2019.09 - 2022.03
M.E.

## PUBLICATIONS

[1] **Mengzhao Wang**, Weizhi Xu, Xiaomeng Yi, Songlin Wu, Zhangyang Peng, Xiangyu Ke, Yunjun Gao, Xiaoliang Xu, Rentong Guo, Charles Xie, "Starling: An I/O-Efficient Disk-Resident Graph Index Framework for High-Dimensional Vector Similarity Search on Data Segment", SIGMOD'24.

[2] **Mengzhao Wang**, Xiangyu Ke, Xiaoliang Xu, Lu Chen, Yunjun Gao, Pinpin Huang, Runkai Zhu, "MUST: An Effective and Scalable Framework for Multimodal Search of Target Modality", ICDE'24.

[3] **Mengzhao Wang**, Haotian Wu, Xiangyu Ke, Yunjun Gao, Xiaoliang Xu, Lu Chen, "An Interactive Multimodal Query Answering System with Retrieval-Augmented Large Language Models", VLDB'24 (Demo)

[4] **Mengzhao Wang**, Lingwei Lv, Xiaoliang Xu, Yuxiang Wang, Qiang Yue, Jiongkang Ni, "An Efficient and Robust Framework for Approximate Nearest Neighbor Search with Attribute Constraint", NeurIPS'23.

[5] **Mengzhao Wang**, Xiaoliang Xu, Qiang Yue, Yuxiang Wang, "A Comprehensive Survey and Experimental Comparison of Graph-Based Approximate Nearest Neighbor Search", VLDB'21.

[6] Xiaoliang Xu, **Mengzhao Wang**, Yuxiang Wang, Dingcheng Ma, "Two-Stage Routing with Optimized Guided Search and Greedy Algorithm on Proximity Graph", KBS'21.

## INVITED TALKS

- 2024.06, Vector Databases: Index Layout and Search Optimizations on SSD, **Baidu**

- 2023.12, High-Dimensional Vector Similarity Search, **Huawei (Hangzhou Research Inst.)**

- 2023.11, Approximate Nearest Neighbor Search with Attribute Constraint, **Huawei (MRC, Germany)**

- 2023.11, Research on Large-Scale High-Dimensional Vector Processing, **Alibaba DAMO Academy**

- 2023.03, Graph-Based Multi-Vector Search and GPU Acceleration, **Datawhale**

- 2021.09, Graph-Based Approximate Nearest Neighbor Search: An Experimental Study, **Zilliz**

# AWARDS

- 2024, SIGMOD Student Travel Award
- 2024, SIGMOD Student Programming Contest Finalist
- 2023, Outstanding Master's Thesis of Zhejiang Province, Hangzhou Dianzi University
- 2022, Outstanding Graduate of Zhejiang Province, Hangzhou Dianzi University
- 2021, National Scholarship for Graduate Student, Hangzhou Dianzi University
- 2021, First Prize of Academic Scholarship, Hangzhou Dianzi University
- 2020, First Prize of Academic Scholarship, Hangzhou Dianzi University
- 2019, Outstanding Graduate of Shandong Province, Qingdao University of Science and Technology
- 2018, National Encouragement Scholarship, Qingdao University of Science and Technology
- 2017, Provincial Government Encouragement Scholarship, Qingdao University of Science and Technology
- 2016, National Encouragement Scholarship, Qingdao University of Science and Technology