

WANG, ZE DONG

🏠 jacky1128.github.io  Google Scholar (H-index:7; Citations:320)  X  GitHub (★1.8K+)  zedong.wang@connect.ust.hk

EDUCATION

The Hong Kong University of Science and Technology (HKUST)

February 2025 - June 2029

Ph.D. in Computer Science and Engineering

Kowloon, Hong Kong

- Advisor: Prof. **Dan Xu**

- Research Topics: Multi-task and Multi-modal Learning

Huazhong University of Science and Technology

September 2019 - June 2023

B.Eng. in Electronic and Information Engineering

Wuhan, China

- Advisor: Prof. **Xinggang Wang**

- Thesis: Efficient ConvNet-based Vision Backbone for Multiple Tasks. (92/100, full grade in NOVELTY sub-term)

- AI Relevant Courses (90.0/100): Intro to Green Communication (95), Engineering Training (94), Multimedia Retrieval (93), Undergrad Thesis (92), Software Project (92), Principles and Applications of Sensors (90), Python Programming (87), Capstone Project (87), Deep Learning and Computer Vision (87), Machine Learning (85).

SELECTED PUBLICATIONS (*: EQUAL CONTRIBUTION; †: CORRESPONDING AUTHOR)

Taming LLMs by Scaling Learning Rates with Gradient Grouping

arXiv 2025

Siyuan Li*, Juanxi Tian*, **Zedong Wang***, Xin Jin, Zicheng Liu, Wentaor Zhang, Dan Xu†

Preprint, Under-review.

MergeVQ: A Unified Framework for Visual Generation & Representation with Token Merging

CVPR 2025

Siyuan Li*, Luyuan Zhang*, **Zedong Wang**, Juanxi Tian, Qingsong Xie, Haoqian Wang, Zhen Lei†

IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2025.

↑ HF Daily Top-1

Unveiling the Backbone-Optimizer Coupling Bias in Visual Representation Learning

arXiv 2024

Siyuan Li*, Juanxi Tian*, **Zedong Wang***, Luyuan Zhang, Zicheng Liu, Weiyang Jin, Stan Z. Li†

Preprint, Under-review.

Cited by 1

↑ HF Page

A Survey on Mixup Augmentations and Beyond

arXiv 2024

Xin Jin, Hongyu Zhu, Siyuan Li, **Zedong Wang**, Zicheng Liu, Chang Yu, Huafeng Qin, Stan Z. Li†

Preprint, Under-review.

Cited by 5

VQDNA: Unleashing the Power of Vector Quantization for Multi-Species Genomic Sequence Modeling ICML 2024

Siyuan Li*, **Zedong Wang***, Zicheng Liu, Cheng Tan, Jiangbin Zheng, Yufei Huang, Stan Z. Li†

The Forty-first International Conference on Machine Learning (ICML), 2024.

Cited by 9

Short-Long Convolutions Help Hardware-Efficient Linear Attention to Focus on Long Sequences

ICML 2024

Zicheng Liu, Siyuan Li, Li Wang, **Zedong Wang**, Yunfan Liu, Stan Z. Li†

The Forty-first International Conference on Machine Learning (ICML), 2024.

Cited by 6

MogaNet: Multi-order Gated Aggregation Network

ICLR 2024

Siyuan Li*, **Zedong Wang***, Zicheng Liu, Cheng Tan, Haitao Lin, Di Wu, Jiangbin Zheng, Stan Z. Li†

The Twelfth International Conference on Learning Representations (ICLR), 2024.

Cited by 118

🔗 226 stars

SemiReward: A General Reward Model for Semi-supervised Learning

ICLR 2024

Siyuan Li*, Weiyang Jin*, **Zedong Wang**, Fang Wu, Zicheng Liu, Cheng Tan, Stan Z. Li†

The Twelfth International Conference on Learning Representations (ICLR), 2024.

Cited by 22

🔗 Code

OpenSTL: A Comprehensive Benchmark of Spatio-Temporal Predictive Learning

NeurIPS 2023

Cheng Tan, Siyuan Li, Zhangyang Gao, Wenfei Guan, **Zedong Wang**, Zicheng Liu, Lirong Wu, Stan Z. Li†

The Annual Conference on Neural Information Processing Systems (NeurIPS), 2023.

Cited by 75

🔗 906 stars

OpenMixup: Open Mixup Toolbox and Benchmark for Visual Representation Learning

arXiv 2022






Siyuan Li*, **Zedong Wang***, Zicheng Liu, Di Wu, Cheng Tan, Stan Z. Li†.

Preprint, Under-review.

Cited by 40

🔗 650 stars

EXPERIENCE & PROJECTS

| | |
|--|---|
| ZEEKR Intelligent Technology <i>Research Intern (HKUST & ZEEKR University-Enterprise Cooperation)</i> <ul style="list-style-type: none">• Advisor: Prof. Dan Xu.• Topics: Multi-task Learning in Autonomous Driving. | April 2024 - February 2025 Hangzhou, China |
| School of Engineering, Westlake University <i>Summer Research Intern (2022), Visiting Student (2022-2024)</i> <ul style="list-style-type: none">• Advisor: Chair Prof. Stan Z. Li (IEEE Fellow, IAPR Fellow).• Topics: Visual Representation Learning and AI for Life Science. | July 2022 - March 2024 Hangzhou, China |
| HUST Vision Lab, Huazhong University of Science and Technology <i>Undergraduate Research Intern, Final Year Project for Bachelor degree</i> <ul style="list-style-type: none">• Advisor: Prof. Xinggang Wang.• Topics: Few-shot Semantic Segmentation. | September 2021 - June 2022 Wuhan, China |
| SIAT-MMLab, Shenzhen Institute of Advanced Technology, CAS <i>Summer Research Intern</i> | June 2021 - September 2021 Shenzhen, China |
| Contributed Open-Source Projects and Libraries: <ul style="list-style-type: none">• OpenMixup: Open-Source Toolbox and Benchmark for Mixup-based Visual Recognition.  650 stars, 58 forks• OpenSTL: Open-Source Toolbox and Benchmark for Video Prediction. (NeurIPS 2023).  906 stars, 99 forks• MogaNet: Open-Source Official Implementation and Weights of MogaNet. (ICLR 2024).  226 stars, 16 forks• MergeVQ: Open-Source Official Implementation & Weights of MergeVQ. (CVPR 2025).  23 stars, 2 forks• Awesome-Optimizers: Open-Source Collection of Optimization Algorithms.  10 stars, 3 forks | July 2021 - Present |

SERVICES

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| Conference Reviewer / PC Member: <ul style="list-style-type: none">• International Conference on Learning Representations (ICLR), 2025.• Annual Conference on Neural Information Processing Systems (NeurIPS), 2024, 2025.• International Conference on Machine Learning (ICML), 2024, 2025.• IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2025.• European Conference on Computer Vision (ECCV), 2024.• AAAI Conference on Artificial Intelligence (AAAI), 2025.• ACM International Conference on Multimedia (ACM MM), 2024.• BMVA The British Machine Vision Conference (BMVC), 2024, 2025. | July 2023 - Present |
| Journal Reviewer: <ul style="list-style-type: none">• IEEE Transactions on Knowledge and Data Engineerings (TKDE). | July 2023 - Present |

SELECTED AWARDS AND HONORS

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| Outstanding Reviewer at ACM MM 2024 Rate: 139/X . | November 2024 |
| Outstanding Reviewer at BMVC 2024 Rate: 19.3% (166/860) . | November 2024 |
| Outstanding Reviewer at ECCV 2024 Rate: 2.7% (198/7293) . | September 2024 |

MISCELLANEOUS

Deep Learning Frameworks: PyTorch, PyTorch Lightning.
Languages: Chinese (native); English (IELTS: 7.5, with L: 8.5, R: 6.5, W: 7.0, S: 7.0, in 2023)