# WANG, ZE DONG

A jacky1128.github.io G Google Scholar (H-index:8; Citation:370) У X G GitHub (★1.8K+) Zedong.wang@connect.ust.hk

### **EDUCATION**

Preprint, Under-review.

# 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

**650** stars

- 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)

SELECTED PUBLICATIONS (*: EQUAL CONTRIBUTION; †: CORRESPONDING AUTHOR)	
Taming LLMs by Scaling Learning Rates with Gradient Grouping Siyuan Li*, Juanxi Tian*, Zedong Wang*, Xin Jin, Zicheng Liu <sup>†</sup> , Wentao Zhang, Dan Xu The 63rd Annual Meeting of the Association for Computational Linguistics (ACL), 2025.	ACL 2025 Main  The HF Daily #4
MergeVQ: A Unified Framework for Visual Generation & Representation with Token Merging Siyuan Li*, Luyuan Zhang*, Zedong Wang, Juanxi Tian, Qingsong Xie, Haoqian Wang, Zhen Lei <sup>†</sup> IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2025.	CVPR 2025 Cited by 1  The HF Daily #1
Unveiling the Backbone-Optimizer Coupling Bias in Visual Representation Learning Siyuan Li*, Juanxi Tian*, Zedong Wang*, Luyuan Zhang, Zicheng Liu, Weiyang Jin, Stan Z. Li† Preprint, Under-review.	arXiv 2024 Cited by 1
A Survey on Mixup Augmentations and Beyond Xin Jin, Hongyu Zhu, Siyuan Li, Zedong Wang, Zicheng Liu, Chang Yu, Huafeng Qin, Stan Z. Li <sup>†</sup> Preprint, Under-review.	arXiv 2024 Cited by 5
<b>VQDNA:</b> Unleashing the Power of Vector Quantization for Multi-Species Genomic Sequence Mod Siyuan Li*, <b>Zedong Wang*</b> , Zicheng Liu, Cheng Tan, Jiangbin Zheng, Yufei Huang, Stan Z. Li <sup>†</sup> The Forty-first International Conference on Machine Learning (ICML), 2024.	eling ICML 2024 Cited by 11
Short-Long Convolutions Help Hardware-Efficient Linear Attention to Focus on Long Sequences Zicheng Liu, Siyuan Li, Li Wang, Zedong Wang, Yunfan Liu, Stan Z. Li <sup>†</sup> The Forty-first International Conference on Machine Learning (ICML), 2024.	ICML 2024 Cited by 7
MogaNet: Multi-order Gated Aggregation Network 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.	ICLR 2024 Cited by 139 232 stars
SemiReward: A General Reward Model for Semi-supervised Learning Siyuan Li*, Weiyang Jin*, Zedong Wang, Fang Wu, Zicheng Liu, Cheng Tan, Stan Z. Li† The Twelfth International Conference on Learning Representations (ICLR), 2024.	ICLR 2024 Cited by 23 Code
OpenSTL: A Comprehensive Benchmark of Spatio-Temporal Predictive Learning Cheng Tan, Siyuan Li, Zhangyang Gao, Wenfei Guan, Zedong Wang, Zicheng Liu, Lirong Wu, Stan Z. The Annual Conference on Neural Information Processing Systems (NeurIPS), 2023.	NeurIPS 2023 Li <sup>†</sup> Cited by 84 \$\mathbb{O}\$ 924 stars
<b>OpenMixup: Open Mixup Toolbox and Benchmark for Visual Representation Learning</b> Siyuan Li*, <b>Zedong Wang*</b> , Zicheng Liu, Di Wu, Cheng Tan, Stan Z. Li <sup>†</sup> .	arXiv 2022 Cited by 43

# **EXPERIENCE & PROJECTS**

#### **ZEEKR Intelligent Technology**

Research Intern (HKUST & ZEEKR University-Enterprise Cooperation)

Hangzhou, China

- Advisor: Prof. Dan Xu.
- Topics: Multi-task Learning in Autonomous Driving.

#### School of Engineering, Westlake University

Summer Research Intern (2022), Visiting Student (2022-2024)

July 2022 - March 2024 Hangzhou, China

April 2024 - February 2025

- Advisor: Chair Prof. Stan Z. Li (IEEE Fellow, IAPR Fellow).
- Topics: Visual Representation Learning and AI for Life Science.

#### **HUST Vision Lab, Huazhong University of Science and Technology**

Undergraduate Research Intern, Final Year Project for Bachelor degree

September 2021 - June 2022 Wuhan, China

- Advisor: Prof. Xinggang Wang.
- Topics: Few-shot Semantic Segmentation.

## SIAT-MMLab, Shenzhen Institute of Advanced Technology, CAS

Summer Research Intern

June 2021 - September 2021

Shenzhen, China July 2021 - Present

# **Contributed Open-Source Projects and Libraries:**

- OpenMixup: Open-Source Toolbox and Benchmark for Mixup-based Visual Recognition. Q 650 stars, 58 forks
- OpenSTL: Open-Source Toolbox and Benchmark for Video Prediction. (NeurIPS 2023). 

  924 stars, 99 forks
- MergeVO: Open-Source Official Implementation & Weights of MergeVO. (CVPR 2025). Q 24 stars, 2 forks
- Awesome-Optimizers: Open-Source Collection of Optimization Algorithms.

# 10 stars, 3 forks

# SERVICES

#### **Conference Reviewer / PC Member:**

July 2023 - Present

- 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.

**Journal Reviewer:** July 2023 - Present

- IEEE Transactions on Knowledge and Data Engineerings (**TKDE**).
- IEEE Transactions on Big Data (**TBD**).

# SELECTED AWARDS AND HONORS

# **ICLR 2025 Notable Reviewer**

May 2025

Rate: 2.6% (473/18323).

**ACM MM 2024 Outstanding Reviewer** 

November 2024

*Rate:* 139/X.

**BMVC 2024 Outstanding Reviewer** 

November 2024

Rate: 19.3% (166/860).

**ECCV 2024 Outstanding Reviewer** 

September 2024

Rate: 2.7% (198/7293).

#### Miscellaneous

Languages: Chinese (native); English (IELTS: 7.5, with L: 8.5, R: 6.5, W: 7.0, S: 7.0, in 2023)