WANG, ZE DONG

jacky1128.github.io Scholar (H-index:7; Citations:288) X GitHub (Stars:1.7K+) 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:* Efficient Multi-Task 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)

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.

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†
*Accepted at The Forty-first International Conference on Machine Learning (**ICML**), 2024.* Cited by 7

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†
*Accepted at The Forty-first International Conference on Machine Learning (**ICML**), 2024.* Cited by 6

LongVQ: Long Sequence Modeling with Vector Quantization on Structured Memory **IJCAI 2024**
Zicheng Liu, Li Wang, Siyuan Li, **Zedong Wang**, Haitao Lin, Stan Z. Li†
*Accepted at The 33rd International Joint Conference on Artificial Intelligence (**IJCAI**), 2024.*

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†
*Accepted at The Twelfth International Conference on Learning Representations (**ICLR**), 2024.* Cited by 106 220 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†
*Accepted at The Twelfth International Conference on Learning Representations (**ICLR**), 2024.* Cited by 19 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†
*Accepted at the Annual Conference on Neural Information Processing Systems (**NeurIPS**), 2023.* Cited by 68 862 stars

Masked Modeling for Self-supervised Representation Learning on Vision and Beyond **arXiv 2023**
Siyuan Li*, Luyuan Zhang*, **Zedong Wang**, Di Wu, Lirong Wu, Zicheng Liu, Jun Xia, Cheng Tan, Yang Liu, Baigui Sun, Stan Z. Li†.
Preprint, Under-review.

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 40 640 stars

Experience & Projects

ZEEKR Intelligent Technology April 2024 - Present
Research Intern (HKUST & ZEEKR University-Enterprise Cooperation) *Hangzhou, China*
- *Advisor:* Prof. **Dan Xu**.
- *Topics:* Multi-Task Learning in Autonomous Driving.

Stan Z. Li's AI Lab, School of Engineering, Westlake University July 2022 - March 2024
Summer Research Intern (2022), Visiting Student (2022-2024) *Hangzhou, China*
- *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 September 2021 - June 2022
Undergraduate Research Intern, Final Year Project for Bachelor degree *Wuhan, China*
- *Advisor:* Prof. **Xinggang Wang**.
- *Topics:* Few-shot Semantic Segmentation.

SIAT-MMLab, Shenzhen Institute of Advanced Technology, CAS June 2021 - September 2021
Summer Research Intern *Shenzhen, China*
- *Topics:* Semantic Segmentation and Text Spotting.

Contributed Open-Source Projects and Libraries: July 2021 - Present

- **OpenMixup**: Open-Source Toolbox and Benchmark for Mixup-based Visual Recognition. **640 stars, 58 forks**
- **OpenSTL**: Open-Source Toolbox and Benchmark for Video Prediction. (**NeurIPS 2023**). **862 stars, 99 forks**
- **MogaNet**: Open-Source Official Implementation and Weights of MogaNet. (**ICLR 2024**). **220 stars, 16 forks**
- **Awesome-Optimizers**: Open-Source Collection of Optimization Algorithms. **10 stars, 2 forks**

Services

Conference Reviewer / PC Member: July 2023 - Present

- IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**), 2025.
- IEEE/CVF International Conference on Computer Vision (**ICCV**), 2025.
- European Conference on Computer Vision (**ECCV**), 2024.
- International Conference on Learning Representations (**ICLR**), 2025.
- International Conference on Machine Learning (**ICML**), 2024, 2025.
- AAAI Conference on Artificial Intelligence (**AAAI**), 2025.
- ACM International Conference on Multimedia (**ACM MM**), 2024.
- BMVA The British Machine Vision Conference (**BMVC**), 2024.

Journal Reviewer: July 2023 - Present

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

Selected Awards and Honors

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

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)