

WANG, ZE DONG

🏠 jacky1128.github.io  Scholar (H-index:6; Citations:240)  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

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

arXiv 2024

 Twitter

 HF Page

A Survey on Mixup Augmentations and Beyond

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

arXiv 2024

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

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.

ICML 2024

Cited by 3

 Twitter

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

ICML 2024

Cited by 5

LongVQ: Long Sequence Modeling with Vector Quantization on Structured Memory

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.

IJCAI 2024

MogaNet: Multi-order Gated Aggregation Network

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.

ICLR 2024

Cited by 88

 214 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†
Accepted at The Twelfth International Conference on Learning Representations (ICLR), 2024.

ICLR 2024

Cited by 9

 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. Li†
Accepted at the Annual Conference on Neural Information Processing Systems (NeurIPS), 2023.

NeurIPS 2023

Cited by 62

 844 stars

Masked Modeling for Self-supervised Representation Learning on Vision and Beyond

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.

arXiv 2023

OpenMixup: Open Mixup Toolbox and Benchmark for Visual Representation Learning

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

arXiv 2022

Cited by 36

 634 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 - Present Hangzhou, China
Stan Z. Li's AI Lab, 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> <ul style="list-style-type: none">• Topics: Semantic Segmentation and Text Spotting.	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.  634 stars, 60 forks• OpenSTL: Open-Source Toolbox and Benchmark for Video Prediction. (<i>NeurIPS 2023</i>).  844 stars, 99 forks• MogaNet: Open-Source Official Implementation and Weights of MogaNet. (<i>ICLR 2024</i>).  214 stars, 12 forks• Awesome-Optimizers: Open-Source Collection of Optimization Algorithms.  10 stars, 2 forks	July 2021 - Present

SERVICES

Program Committee Member / Reviewer <ul style="list-style-type: none">• IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2025.• International Conference on Learning Representations (ICLR), 2024 (TinyPapers), 2025.• International Conference on Machine Learning (ICML), 2024, 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.• IAPR International Conference on Pattern Recognition (ICPR), 2024.	July 2023 - Present
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SELECTED AWARDS AND HONORS

ACM MM 2024 Outstanding Reviewer <i>Only (139/X) awarded by ACM MM 2024 Program Committee.</i>	November 2024
BMVC 2024 Outstanding Reviewer <i>Only 19.3% (166/860) awarded by BMVC 2024 Program Committee.</i>	November 2024
ECCV 2024 Outstanding Reviewer <i>Only 2.7% (198/7293) awarded by ECCV 2024 Program Committee.</i>	September 2024
Westlake University Summer Studentship <i>Only 2/100+ applicants are selected for internship opportunity.</i>	August 2022 Awarded by Westlake University

MISCELLANEOUS

Programming Languages: Python, C, MATLAB, LaTeX.
Deep Learning Frameworks: PyTorch, PyTorch Lightning.
Operating Systems: Linux (Ubuntu, CentOS), MacOS, Windows.
Languages: Chinese (native); English (IELTS: 7.5, with <u>L</u> : 8.5, <u>R</u> : 6.5, <u>W</u> : 7.0, <u>S</u> : 7.0, in 2023)