Ze Dong Wang

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Education

The Hong Kong University of Science and Technology (HKUST) — Feb 2025 - Jun 2029
Ph.D. in Computer Science and Engineering — *Hong Kong SAR*
- *Advisor:* Prof. **Dan Xu**
- *Research:* Computer Vision, Multi-Task Learning.

Huazhong University of Science and Technology — Sep 2019 - Jun 2023
B.Eng. in Electronic and Information Engineering — *Wuhan, China*
- *Advisor:* Prof. **Xinggang Wang**
- *Thesis:* Efficient ConvNet-based Vision Backbone for Multiple Tasks (Grade: 92/100, full marks in novelty)

Selected Publications (*: Equal Contribution; †: Corresponding Author)

Rep-MTL: Unleashing the Power of Representation-level Task Saliency for Multi-Task Learning — **ICCV 2025 (Hightlight)**
Zedong Wang, Siyuan Li, Dan Xu†
IEEE/CVF International Conference on Computer Vision (ICCV), 2025 — ↑ HF Daily #5

Taming LLMs by Scaling Learning Rates with Gradient Grouping — **ACL 2025**
Siyuan Li*, Juanxi Tian*, **Zedong Wang***, Xin Jin, Zicheng Liu†, Wentao Zhang, Dan Xu
The Annual Meeting of the Association for Computational Linguistics (ACL), 2025 — ↑ HF Daily #5

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† — Cited by **4**
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2025 — ↑ HF Daily #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† — Cited by **5**
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† — Cited by **14**
The International Conference on Machine Learning (ICML), 2024.

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† — Cited by **8**
The International Conference on Machine Learning (ICML), 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† — Cited by **170**
The International Conference on Learning Representations (ICLR), 2024 — **246** 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† — Cited by **26**
The International Conference on Learning Representations (ICLR), 2024. — 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† — Cited by **90**
The Annual Conference on Neural Information Processing Systems (NeurIPS), 2023. — **956** 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†. — Cited by **42**
Preprint, Under-review. — **656** stars

Research Experience and Projects

The Hong Kong University of Science and Technology Apr 2024 - Feb 2025
Research Intern (HKUST-ZEEKR University-Industry Collaboration) *Hangzhou, China*

- *Advisor:* Prof. **Dan Xu**.
- *Research:* Efficient Multi-Task Learning.

School of Engineering, Westlake University Jul 2022 - Apr 2024
Summer Research Intern (2022), Visiting Student (2022-2024) *Hangzhou, China*

- *Advisor:* Chair Prof. **Stan Z. Li** (IEEE Fellow, IAPR Fellow).
- *Research:* Visual Representation Learning.

HUST Vision Lab, Huazhong University of Science and Technology Sep 2021 - Jun 2022
Undergraduate Research Assistant, Final Year Project *Wuhan, China*

- *Advisor:* Prof. **Xinggang Wang**.
- *Research:* Few-shot Semantic Segmentation.

Open-Source Projects and Contributions: Jul 2021 - Present

- **OpenMixup**: Toolbox and benchmark for mixup-based visual recognition. **656 stars, 60 forks**
- **OpenSTL**: Toolbox for spatio-temporal predictions (**NeurIPS 2023**). **956 stars, 158 forks**
- **MogaNet**: Official implementation for MogaNet paper (**ICLR 2024**). **246 stars, 20 forks**
- **MergeVQ**: Official implementation for MergeVQ paper (**CVPR 2025**). **42 stars, 2 forks**
- **Rep-MTL**: Official implementation for Rep-MTL paper (**ICCV 2025 Highlight**). **16 stars, 4 forks**

Academic Services

Conference Reviewer / Program Committee Member: Jul 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
- IEEE/CVF Winter Conference on Applications of Computer Vision (**WACV**), 2026
- BMVA The British Machine Vision Conference (**BMVC**), 2024, 2025
- IAPR International Conference on Pattern Recognition (**ICPR**), 2024

Journal Reviewer: Jul 2023 - Present

- IEEE Transactions on Knowledge and Data Engineering (**TKDE**)

Awards and Recognitions

Notable Reviewer Award, International Conference on Learning Representations (ICLR), 2025. May 2025
*Top **2.6%** of reviewers **(473/18,323)**.*

Outstanding Reviewer Award, ACM International Conference on Multimedia (ACM MM), 2024. Nov 2024
*Among **139** outstanding reviewers.*

Outstanding Reviewer Award, The British Machine Vision Conference (BMVC), 2024. Nov 2024
*Top **19.3%** of reviewers **(166/860)**.*

Outstanding Reviewer Award, European Conference on Computer Vision (ECCV), 2024. Sep 2024
*Top **2.7%** of reviewers **(198/7,293)**.*

Miscellaneous

Languages: Chinese (native), English (fluent - IELTS 7.5: Listening 8.5, Reading 6.5, Writing 7.0, Speaking 7.0, 2023)