# **Siteng Huang**

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### **Education**

**Zhejiang University** 

Hangzhou, China

Ph.D. - Computer Science

Sep. 2019 – Jun. 2024

• Thesis: Model Transfer for Multimodal Understanding and Generation

Westlake University

Hangzhou, China

Visiting Student & Joint-Supervision Program

Oct. 2018 – Jun. 2024

• Advisor: Prof. Donglin Wang

• Affiliated with Machine Intelligence Laboratory (MiLAB)

Wuhan University

Wuhan, China

Bachelor of Engineering - Software Engineering

Sep. 2015 – Jun. 2019

• GPA: 3.7/4.0, Rank: 3/244

#### Research Areas

Focusing on multi-modal large models, especially vision-language models (VLMs), including

- Generation/AIGC: text-to-image/video (T2I/V) generation, customized & controllable generation, test-time diffusion intervention, multi-modal large language models (MLLMs)
- Understanding: text-video retrieval, compositional zero-shot learning, few-shot learning, visual grounding
- Transfer: parameter-efficient fine-tuning (PEFT/PETL), meta-learning, domain adaptation
- Embodied AI: vision-language-action models (VLAs), foundation models for robotics

## **Professional Experience**

#### DAMO Academy/TongYi Lab, Alibaba Group

Research Intern

Hangzhou, China Mar. 2022 – July. 2024

• Directors: Gong Biao, Yu Liu, and Deli Zhao.

## **Peer-reviewed Conference Publications**

(\* denotes equal contribution.)

# [C1] PiTe: Pixel-Temporal Alignment for Large Video-Language Model

Yang Liu, Pengxiang Ding, **Siteng Huang**, Min Zhang, Han Zhao, Donglin Wang *European Conference on Computer Vision 2024* (ECCV 2024)

#### [C2] QUAR-VLA: Vision-Language-Action Model for Quadruped Robots

Pengxiang Ding, Han Zhao, Wenxuan Song, Wenjie Zhang, Min Zhang, **Siteng Huang**, Ningxi Yang, Donglin Wang

European Conference on Computer Vision 2024 (ECCV 2024)

## [C3] Learning Disentangled Identifiers for Action-Customized Text-to-Image Generation

**Siteng Huang**, Biao Gong, Yutong Feng, Xi Chen, Yuqian Fu, Yu Liu, Donglin Wang *IEEE/CVF Conference on Computer Vision and Pattern Recognition 2024* (CVPR 2024)

# [C4] Troika: Multi-Path Cross-Modal Traction for Compositional Zero-Shot Learning Siteng Huang, Biao Gong, Yutong Feng, Yiliang Lv, Donglin Wang

IEEE/CVF Conference on Computer Vision and Pattern Recognition 2024 (CVPR 2024)

# [C5] Check, Locate, Rectify: A Training-Free Layout Calibration System for Text-to-Image Generation Biao Gong\*, Siteng Huang\*, Yutong Feng, Shiwei Zhang, Yuyuan Li, Yu Liu

IEEE/CVF Conference on Computer Vision and Pattern Recognition 2024 (CVPR 2024)

[C6] DARA: Domain- and Relation-aware Adapters Make Parameter-efficient Tuning for Visual Grounding Ting Liu, Xuyang Liu, Siteng Huang, Honggang Chen, Quanjun Yin, Long Qin, Donglin Wang, Yue Hu IEEE Conference on Multimedia Expo 2024 (ICME 2024)

- [C7] VGDiffZero: Text-to-image Diffusion Models Can Be Zero-shot Visual Grounders Xuyang Liu\*, Siteng Huang\*, Yachen Kang, Honggang Chen, Donglin Wang IEEE International Conference on Acoustics, Speech and Signal Processing 2024 (ICASSP 2024)
- [C8] Prompt-based Distribution Alignment for Unsupervised Domain Adaptation Shuanghao Bai, Min Zhang, Wanqi Zhou, Siteng Huang, Zhirong Luan, Donglin Wang, Badong Chen The 38th AAAI Conference on Artificial Intelligence (AAAI 2024)
- [C9] VoP: Text-Video Co-operative Prompt Tuning for Cross-Modal Retrieval
  Siteng Huang, Biao Gong, Yulin Pan, Jianwen Jiang, Yiliang Lv, Yuyuan Li, Donglin Wang
  IEEE/CVF Conference on Computer Vision and Pattern Recognition 2023 (CVPR 2023)
- [C10] Reference-Limited Compositional Zero-Shot Learning Siteng Huang, Qiyao Wei, Donglin Wang ACM International Conference on Multimedia Retrieval 2023 (ICMR 2023)
- [C11] Tree Structure-Aware Few-Shot Image Classification via Hierarchical Aggregation Min Zhang, Siteng Huang, Wenbin Li, Donglin Wang European Conference on Computer Vision 2022 (ECCV 2022)
- [C12] Domain Generalized Few-shot Image Classification via Meta Regularization Network Min Zhang, Siteng Huang, Donglin Wang IEEE International Conference on Acoustics, Speech and Signal Processing 2022 (ICASSP 2022)
- [C13] HINFShot: A Challenge Dataset for Few-Shot Node Classification in Heterogeneous Information Network

Zifeng Zhuang, Xintao Xiang, **Siteng Huang**, Donglin Wang *ACM International Conference on Multimedia Retrieval 2021* (ICMR 2021)

- [C14] Pareto Self-Supervised Training for Few-Shot Learning Zhengyu Chen, Jixie Ge, Heshen Zhan, Siteng Huang, Donglin Wang IEEE/CVF Conference on Computer Vision and Pattern Recognition 2021 (CVPR 2021)
- [C15] Attributes-Guided and Pure-Visual Attention Alignment for Few-Shot Recognition Siteng Huang, Min Zhang, Yachen Kang, Donglin Wang The 35th AAAI Conference on Artificial Intelligence (AAAI 2021)
- [C16] DSANet: Dual Self-Attention Network for Multivariate Time Series Forecasting Siteng Huang, Donglin Wang, Xuehan Wu, Ao Tang The 28th ACM International Conference on Information and Knowledge Management (CIKM 2019)

# **Preprints & Under Review**

(Only including publicly available work.)

- [P1] Focus-Consistent Multi-Level Aggregation for Compositional Zero-Shot Learning Fengyuan Dai, Siteng Huang, Min Zhang, Biao Gong, Donglin Wang
- [P2] Cobra: Extending Mamba to Multi-modal Large Language Model for Efficient Inference Han Zhao, Min Zhang, Pengxiang Ding, Wei Zhao, Siteng Huang, Donglin Wang
- [P3] Sparse-Tuning: Adapting Vision Transformers with Efficient Fine-tuning and Inference Ting Liu, Xuyang Liu, Liangtao Shi, Zunnan Xu, Siteng Huang, Yi Xin, Quanjun Yin

### **Professional Services**

- Journal reviewer for TNNLS, ACM TIST, CPE
- Conference reviewer for CVPR, ICCV, ECCV, AAAI, IJCAI, ICME, ICMR, ACCV, ICPR

#### **Honors & Awards**

| • | Outstanding Graduates, Zhejiang University   | 2024 |
|---|--|------|
| • | National Scholarship (Top 1%, highest scholarship from Ministry of Education of China) | 2020 |
|   |  | <br> |

• Postgraduate Academic Fellowship, Zhejiang University

2019–2024

• Excellent Student Scholarship, Wuhan University (Top 5%)

2016-2019