

Zhang Jingyi

Singapore

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Education

Nanyang Technological University (NTU)

DOCTOR OF PHILOSOPHY

Singapore

Jan 2022 - June 2025

- College of Computing and Data Science

Nanyang Technological University (NTU)

MASTER OF SCIENCE

Singapore

July 2019 - Jun 2020

- School of Electrical and Electronic Engineering

University of Electronic Science and Technology of China (UESTC)

BACHELOR OF SCIENCE

Chengdu, China

Sep 2015 - Jun 2019

- School of Electronic Information Science and Technology

Employment

Multimedia and Interactive Computing Lab, NTU

RESEARCH ASSOCIATE

Singapore

July 2024 - Oct 2024

- Developing novel deep learning algorithms in computer vision and natural language processing.

S-Lab, NTU

RESEARCH ASSOCIATE

Singapore

Sep 2020 - Jun 2024

- Developing cutting-edge AI algorithms in computer vision, natural language processing and deep learning.

Publications

R1-VL: Learning to Reason with Multimodal Large Language Models via Step-wise Group Relative Policy Optimization

UNDER REVIEW

2025

- **Jingyi Zhang**, Jiaxing Huang, Huanjin Yao, Shunyu Liu, Xikun Zhang, Shijian Lu, Dacheng Tao

Mulberry: Empowering MLLM with o1-like Reasoning and Reflection via Collective Monte Carlo Tree Search

UNDER REVIEW

2025

- Huanjin Yao, Jiaxing Huang, Wenhao Wu, **Jingyi Zhang**, Yibo Wang, Shunyu Liu, Yingjie Wang, Yuxin Song, Haocheng Feng, Li Shen, Dacheng Tao

MMReason: An Open-Ended Multi-Modal Multi-Step Reasoning Benchmark for MLLMs Toward AGI

UNDER REVIEW

2025

- Huanjin Yao, Jiaxing Huang, Yawen Qiu, Michael K. Chen, Wenzheng Liu, Wei Zhang, Wenjie Zeng, Xikun Zhang, **Jingyi Zhang**, YuXin Song, Wenhao Wu, Dacheng Tao

Historical Test-time Prompt Tuning for Vision Foundation Models

CONFERENCE ON NEURAL INFORMATION PROCESSING SYSTEMS

NeurIPS

2024

- **Jingyi Zhang**, Jiaxing Huang, Xiaoqin Zhang, Ling Shao, Shijian Lu

Open-Vocabulary Object Detection via Language Hierarchy

CONFERENCE ON NEURAL INFORMATION PROCESSING SYSTEMS

NeurIPS

2024

- Jiaxing Huang, **Jingyi Zhang**, Kai Jiang, Shijian Lu

Vision-Language Models for Vision Tasks: A Survey

IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE

- **Jingyi Zhang**, Jiaxing Huang, Sheng Jin, Shijian Lu

TPAMI

2024

Learning to Prompt Segment Anything Models

UNDER REVIEW

- Jiaxing Huang, Kai Jiang, **Jingyi Zhang**, Han Qiu, Lewei Lu, Shijian Lu, Eric Xing

2024

Visual Instruction Tuning towards General-Purpose Multimodal Model: A Survey

PREPRINT

- Jiaxing Huang, **Jingyi Zhang**, Kai Jiang, Han Qiu, Shijian Lu

2024

Black-box Unsupervised Domain Adaptation with Bi-directional Atkinson-Shiffrin Memory

INTERNATIONAL CONFERENCE ON COMPUTER VISION

- **Jingyi Zhang**, Jiaxing Huang, Xueying Jiang, Shijian Lu

ICCV

2023

UniDAformer: Unified Domain Adaptive Panoptic Segmentation Transformer via Hierarchical Mask Calibration

CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION

- **Jingyi Zhang**, Jiaxing Huang, Xiaoqin Zhang, Shijian Lu

CVPR

2023

DA-DETR: Domain Adaptive Detection Transformer with Information Fusion

CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION

- **Jingyi Zhang**, Jiaxing Huang, Zhipeng Luo, Gongjie Zhang, Xiaoqin Zhang, Shijian Lu

CVPR

2023

Towards Efficient Use of Multi-Scale Features in Transformer-Based Object Detectors

CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION

- Gongjie Zhang, Zhipeng Luo, Yingchen Yu, Zichen Tian, **Jingyi Zhang**, Shijian Lu

CVPR

2023

Spectral Unsupervised Domain Adaptation for Visual Recognition

CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION

- **Jingyi Zhang**, Jiaxing Huang, Zichen Tian, Shijian Lu

CVPR

2022

Academic Services

2023-2025 **Conference Reviewer**, NeurIPS, ICLR, ICML, CVPR, ICCV, ECCV, AAAI, BMCV, WACV

2023-2025 **Journal Reviewer**, TPAMI, IJCV, TCSVT, TMM, TETCI, Neural Networks

2023-2025 **Undergraduate Final Year Project Supervision**, College of Computing and Data Science, NTU

2024-2025 **Master's Dissertations Supervision**, College of Computing and Data Science, NTU