ZHILI LIU (刘智立)

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EDUCATION

The Hong Kong University of Science and Technology Hong Kong, China
Ph.D in *Computer Science* Feb 2020 - now
Supervised by Prof. James T. Kwok

The Chinese University of Hong Kong Hong Kong, China
M.Sc. in *Computer Science* Sep 2018 - Jul 2019
Supervised by Prof. Bei Yu
GPA: 3.39/4.0

Tongji University Shanghai, China
B.Eng. in *Software Engineering* Sep 2014 - Jul 2018
GPA: 91.2/100
Ranking: 6/182 (overall)   1/32(Multimedia Science)

EXPERIENCE

Huawei Noah's Ark Lab Hong Kong, China
Intern @ *AI theory Lab*, supervised by Prof. Zhenguo Li Jun 2019 - Now

The Chinese University of Hong Kong Hong Kong, China
Research Assistant, supervised by Prof. Bei Yu Sep 2018 - May 2019

Microsoft Research Asia Beijing, China
Intern @ *Intelligent Multimedia Group*, supervised by Dr. Chong Luo Jan 2018 - Jul 2018

CCi Intelligence Co., Ltd Shanghai, China
Research Intern Jul 2017 - Jan 2018

SELECTED PUBLICATIONS

Full publication list on my Google Scholar. (* denotes equal contribution)

I. Multi-modal Foundation Models

[1] **EMOVA: Empowering Language Models to See, Hear and Speak with Vivid Emotions**   CVPR 2025
Kai Chen*, Yunhao Gou*, Runhui Huang*, **Zhili Liu***, Daxin Tan*, *and other 26 authors*

[2] **Corrupted but Not Broken: Understanding and Mitigating the Negative Impacts of Corrupted Data in Visual Instruction Tuning**   EMNLP 2025 Oral
Yunhao Gou, Hansi Yang, **Zhili Liu**, Kai Chen, Yihan Zeng, Lanqing Hong, Zhenguo Li, Qun Liu, Bo Han, James Kwok, Yu Zhang

II. Multi-modal Foundation Models - Mixture of Cluster-conditional Experts

[3] **Mixture of Cluster-conditional LoRA Experts for Vision-language Instruction Tuning**   TIP 2025
Yunhao Gou*, **Zhili Liu***, Kai Chen*, Lanqing Hong, Hang Xu, Aoxue Li, Dit-Yan Yeung, James T. Kwok, Yu Zhang

[4] **Task-customized Masked Autoencoder via Mixture of Cluster-conditional Experts**   ICLR 2023 Spotlight
Zhili Liu, Kai Chen, Jianhua Han, Lanqing Hong, Hang Xu, Zhenguo Li, James Kwok

[5] **Task-Customized Self-Supervised Pre-training with Scalable Dynamic Routing**   AAAI 2022
Zhili Liu, Jianhua Han, Kai Chen, Lanqing Hong, Hang Xu, Chunjing Xu, Zhenguo Li

III. Multi-modal Foundation Models - Model Safety & Reasoning

[6] **Mixture of insighTful Experts (MoTE): The Synergy of Thought Chains and Expert Mixtures in Self-Alignment**   ACL 2025
Zhili Liu*, Yunhao Gou*, Kai Chen*, Lanqing Hong, Jiahui Gao, Fei Mi, Yu Zhang, Zhenguo Li, Xin Jiang, Qun Liu, James T. Kwok

[7] **Perceptual Decoupling for Scalable Multi-modal Reasoning via Reward-Optimized Captioning**   ArXiv 2025
Yunhao Gou*, Kai Chen*, **Zhili Liu***, Lanqing Hong, Xin Jin, Zhenguo Li, James T. Kwok, Yu Zhang

[8] **Implicit Concept Removal of Diffusion Models**   ECCV 2024
Zhili Liu, Kai Chen, Yifan Zhang, Jianhua Han, Lanqing Hong, Hang Xu, Zhenguo Li, Dit-Yan Yeung, James Kwok

[9] **Eyes Closed, Safety On: Protecting Multimodal LLMs via Image-to-Text Transformation**   ECCV 2024
Yunhao Gou*, Kai Chen*, **Zhili Liu***, Lanqing Hong, Hang Xu, Zhenguo Li, Dit-Yan Yeung, James Kwok, Yu Zhang

IV. Model Efficiency

[10] **MoPE-CLIP: Structured Pruning for Efficient Vision-Language Models with Module-wise Pruning Error Metric**   CVPR 2024
Haokun Lin, Haoli Bai, **Zhili Liu**, Lu Hou, Muyi Sun, Linqi Song, Ying Wei, Zhenan Sun

[11] **DiffFit: Unlocking Transferability of Large Diffusion Models via Simple Parameter-Efficient Fine-Tuning**   ICCV 2023 Oral
Enze Xie, Lewei Yao, Han Shi, **Zhili Liu**, Daquan Zhou, Zhaoqiang Liu, Jiawei Li, Zhenguo Li

PATENT

[CN112633385A] **Zhili Liu,** Qijun Luo, Lanqing Hong, Chongxuan Li, Jun Zhu, Zhenguo Li. *Relaxed conditional image transfer for semi-supervised domain adaptation*, Published at Apr 8th, 2025

[CN111291809A] Hang Xu, **Zhili Liu**, Fengwei Zhou, Jiawei Li, Xiaodan Liang, Zhenguo Li, Li Qian *EHSOD: CAM-Guided End-to-end Hybrid-Supervised Object Detection with Cascade Refinement*, Published at Apr 12th, 2024

SELECTED HONOURS

CUHK Entrance Scholarship & Distinguished Academic Performance Scholarship (top 3%)	2019/2018
Shanghai Outstanding Graduates, Shanghai (Top 5%)	2018
Scholarship for Outstanding Student, Tongji University (Top 5%)	2017/2016/2015

ACADEMIC SERVICES

Conference Reviewer

ICLR, ICML, NeurIPS, CVPR, ICCV, ECCV, AAAI, IJCAI

Journal Reviewer

TPAMI, TIP, TNNLS, AIJ