

Shaozhe Hao

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EDUCATION

The University of Hong Kong
Ph.D. Student in Computer Science
Supervisor: Prof. Kenneth K.Y. Wong

Hong Kong SAR
Sep. 2021 - Jul. 2025 (expected)

Huazhong University of Science and Technology
B.Eng. in Automation
GPA: 3.97/4.0, Rank: 2/189

Wuhan, CN
Sep. 2017 - Jun. 2021

WORKING EXPERIENCE

Research intern
Intellifusion Technologies

Shenzhen, CN
Apr. 2024 - Now

Develop autoregressive-based and diffusion-based generative models for class-conditional and text-to-image generation, working with Dr. Xianbiao Qi.

Research assistant
The University of Hong Kong

Hong Kong SAR
Jul. 2020 - Aug. 2020

Develop effective models to address occluded face recognition, working with Prof. Kenneth K.Y. Wong.

SELECTED PUBLICATIONS

See the full publication list at Google Scholar.

- Shaozhe Hao et al.** ConceptExpress: Harnessing Diffusion Models for Single-image Unsupervised Concept Extraction. *ECCV*, 2024.
 - We present a novel diffusion-based method that can extract multiple instance-level concepts from a single image without any supervision like masks, concept words, or concept numbers. [code]
- Shaozhe Hao et al.** ViCo: Detail-Preserving Visual Condition for Personalized Text-to-Image Generation. *arXiv*, 2023.
 - We introduce a novel, lightweight, plug-and-play method that integrates visual conditioning into personalized text-to-image generation. We enable efficient optimization that leads to improved performance. [code]
- Shaozhe Hao et al.** CiPR: An Efficient Framework with Cross-instance Positive Relations for Generalized Category Discovery. *Transactions on Machine Learning Research (TMLR)*, 2024.
 - We address generalized category discovery by exploiting cross-instance positive relations for contrastive learning. We introduce a novel semi-supervised hierarchical clustering algorithm to produce such relations. [code]
- Shaozhe Hao et al.** Learning Attention as Disentangler for Compositional Zero-shot Learning. *CVPR*, 2023.
 - We address compositional zero-shot learning by using cross-attention to disentangle concept embeddings, while regularizing optimization with the earth mover's distance at the attention level. [code]

HONORS & AWARDS

- Arthur & Louise May Memorial Scholarship, HKU 2023
- Postgraduate Scholarships, HKU 2021-2025
- Outstanding Graduate, HUST 2021
- National Scholarship of China 2018, 2019

SKILLS

Programming Languages Python, Matlab, C/C++
Tools PyTorch, OpenCV, L^AT_EX