Yucheng Han

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EDUCATION

Nanyang Technological University Singapore
3rd year Ph.D. candidate advised by Prof. Zhang Hanwang *from Aug. 2021 to now*
Tsinghua University Beijing, China
*B.Eng. in Automation (**GPA: 3.77/4.00, Ranking:33/168**)* *from Sep. 2017 to Jul. 2021*

RESEARCH EXPERIENCES

Tencent Jul. 2023 – Jul. 2024
Tencent (Shanghai) *mentored by Dr. Chi Zhang and Dr. Gang Yu*
- Improve the abilities of Multi-modal LLM (MLLM) in chart understanding and generation.
- Explore how to generate images based on multi-modal conditions.

Johns Hopkins University Jun. 2020 – Sep. 2020
Computational Cognition, Vision, and Learning Lab *advised by Prof. Alan Yuille*
- Reimplemented AdvProp using PyTorch; One paper is accepted by ICLR 2022.

Tsinghua University Jan. 2019 – Jun. 2020
Intelligent Vision Group, Tsinghua University *advised by Prof. Jiwen Lu*
- Two papers are accepted by PR and TIP, respectively.

PUBLICATIONS & MANUSCRIPTS

[1] **Yucheng Han***, Rui Wang*, Chi Zhang, Juntao Hu, Pei Cheng, Bin Fu, Hanwang Zhang. EMMA: Your Text-to-Image Diffusion Model Can Secretly Accept Multi-Modal Prompts. *On Arxiv.*

[1] Chi Zhang*, Zhao Yang*, Jiaxuan Liu*, **Yucheng Han**, Xin Chen, Zebiao Huang, Bin Fu, Gang Yu. AppAgent: Multimodal Agents as Smartphone Users. *On Arxiv.*

[2] **Yucheng Han***, Chi Zhang*, Xin Chen, Xu Yang, Zhibin Wang, Gang Yu, Bin Fu, Hanwang Zhang. ChartLlama: A Multimodal LLM for Chart Understanding and Generation. *On Arxiv.*

[3] **Yucheng Han**, Na Zhao, Weiling Chen, KT Ma, Hanwang Zhang. Dual-Perspective Knowledge Enrichment for Semi-Supervised 3D Object Detection. *AAAI 2024.*

[4] Beier Zhu, Yulei Niu, **Yucheng Han**, Yue Wu, Hanwang Zhang. Prompt-aligned Gradient for Prompt Tuning. *ICCV 2023*

[5] Jieru Mei, **Yucheng Han**, Yutong Bai, Yixiao Zhang, Yingwei Li, Xianhang Li, Alan Yuille, Cihang Xie. Fast AdvProp. *ICLR 2022*

[6] Wencheng Zhu, **Yucheng Han**, Jiwen Lu and Jie Zhou. Relational Reasoning over Spatial-Temporal Graphs for Video Summarization. *IEEE Transactions on Image Processing*

[7] Wencheng Zhu, Jiwen Lu, **Yucheng Han**, and Jie Zhou. Learning Multiscale Hierarchical Attention for Video Summarization. *Pattern Recognition*

AWARDS & HONORS

Academic Excellence Award (28/174 in the Department of Automation) Oct. 2019
First Prize in China College Physics Competition in Dec. 2018 Dec. 2018
Silver Medal in 33th National Physics Olympiad. Oct. 2016

STANDARDIZED TESTS

TOEFL iBT: Total 105/120 (Reading 30, Listening 26, Speaking 24, Writing 25)
GRE: Verbal 158/170, Quantitative 170/170, Analytical Writing 4.0/6.0