

Kaihua Tang

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EDUCATION

Nanyang Technological University, Singapore

- Ph.D Candidate in School of Computer Science and Engineering Jul 2018 – Now
 - Adviser: Asst Prof. Hanwang Zhang

Shanghai Jiao Tong University, China, Waseda University, Japan

- Dual M.S. Program in Computer Science Sep 2015 – Mar 2018
 - Adviser: Prof. Lizhuang Ma & Prof. Sei-ichiro Kamata

Shanghai Jiao Tong University, Shanghai, China

- B.S. in Computer Science Sep 2011 – Jul 2015
 - Adviser: Prof. Kai Yu
- Second Major in Chinese Painting Sep 2012 – Jul 2014
 - Adviser: Qi Wang

PUBLICATIONS

(CITATION 400+ BY MAY 2021)

- Kaihua Tang, Mingyuan Tao, Hanwang Zhang, “Adversarial Visual Robustness by Causal Intervention,” under review, 2021.
- Xinting Hu, Kaihua Tang, Chunyan Miao, Xian-Sheng Hua, Hanwang Zhang, “Distilling Causal Effect of Data in Class-Incremental Learning,” in *CVPR*, Jun 2021.
- Yulei Niu, Kaihua Tang, Hanwang Zhang, Zhiwu Lu, Xian-Sheng Hua, Ji-Rong Wen, “Counterfactual VQA: A Cause-Effect Look at Language Bias,” in *CVPR*, Jun 2021.
- Kaihua Tang, Jianqiang Huang, Hanwang Zhang, “Long-Tailed Classification by Keeping the Good and Removing the Bad Momentum Causal Effect,” in *NeurIPS*, Dec 2020.
- Mitra Tajrobehkar, Kaihua Tang, Hanwang Zhang, Joo-Hwee Lim, “Align R-CNN: A Pairwise Head Network for Visual Relationship Detection,” in *TMM*, 2021.
- Kaihua Tang, Yulei Niu, Jianqiang Huang, Jiabin Shi, Hanwang Zhang, “Unbiased Scene Graph Generation from Biased Training,” **Oral Presentation**, in *CVPR*, Jun 2020.
- Xinting Hu, Yi Jiang, Kaihua Tang, Hanwang Zhang, Chunyan Miao, Jingyuan Chen, “Learning to Segment the Tail,” in *CVPR*, Jun 2020.
- Kaihua Tang, Hanwang Zhang, Baoyuan Wu, Wenhan Luo, Wei Liu, “Learning to Compose Dynamic Tree Structures for Visual Contexts,” **Oral Presentation & Finalists (45/5160)**, in *CVPR*, Jun 2019.
- Xu Yang, Kaihua Tang, Hanwang Zhang, Jianfei Cai, “Auto-Encoding Scene Graphs for Image Captioning,” **Oral Presentation**, in *CVPR*, Jun 2019.
- Kaihua Tang, Sei-ichiro Kamata, Xiaonan Hou, Shouhong Ding, Lizhuang Ma, “Eigen-Aging Reference Coding for Cross-Age Face Verification and Retrieval,” in *ACCV*, Nov 2016.

PROJECTS

(GITHUB STAR 1300+ BY MAY 2021)

Long-Tailed-Recognition.pytorch (star 370+)

- Description: a strong single-stage baseline for Long-Tailed Classification, Detection, and Instance Segmentation. It is also a PyTorch implementation of De-confounded TDE (NeurIPS 2020).
- Github Link: <https://github.com/KaihuaTang/Long-Tailed-Recognition.pytorch> 2020

Scene-Graph-Benchmark.pytorch (star 500+)

- Description: an open-source scene graph generation (SGG) codebase, which integrates all the existing metrics and several well-known SGG models. It's also a PyTorch implementation of unbiased TDE.
- Github Link: <https://github.com/KaihuaTang/Scene-Graph-Benchmark.pytorch> 2020

VQA2.0-Recent-Approachs-2018.pytorch (star 240+)

- Description: an open-source visual question answering (VQA) framework built on top of the bottom-up-attention-vqa. It integrates several popular VQA methods published in 2018.
- Github Link: <https://github.com/KaihuaTang/VQA2.0-Recent-Approachs-2018.pytorch> 2019

AWARDS & SCHOLARSHIPS	▪ 2021 Alibaba Outstanding Interns in Academic Cooperation, Alibaba Group	2021
	▪ 2021 & 2019 PREMIA Best Student Paper Award, 2nd Place, PREMIA	2021, 2019
	▪ Honorable Judge Award, The 5th Cloud Programming World Cup, FORUM8 Tokyo	2017
	▪ Waseda Partial Tuition-Waiver Scholarship for Privately Financed International Students GPA rank Top 10 out of 300.	2015
	▪ IPS special scholarship for international students, Waseda University	2014
	▪ Monbukagakusho Honors Scholarship for Privately Financed International Students	2014
	▪ Emerging Talent Award, Cloud Programming World Cup (FORUM8), Tokyo	2013
EXPERIENCE	Alibaba, DAMO Academy, Research Intern , Hangzhou, China	
	▪ Project: Robust Machine Learning	Jul 2019- Now
	Tencent, AI Lab, Research Intern , ShenZhen, China	
	▪ Project: Scene Graph Generation	Mar 2018- Jun 2018
	Mihoyo, Mobile Game Development Intern , Shanghai, China	
	▪ Project: Mobile Game Development Using Unity 3D.	Apr 2017- Dec 2017
	TOSHIBA Research & Development Intern , TOSHIBA, Tokyo, Japan	
	▪ Project: Image Inpainting	Aug 2015- Sep 2015
SKILLS	Recently Used: Python, Pytorch; Have Experience Before: MATLAB, C#, Java, C++,	
LANGUAGES	▪ Chinese: Native language, English: Fluent (TOEFL 103, GRE 328), Japanese: Basic (N2).	
VOLUNTEER ACTIVITIES	▪ 28th ACM-Multimedia Program, ACM-MM Committees	Oct 2020 – Oct 2020
	▪ YAPM Summer Volunteer Program, TECC Organization	Jul 2014 – Aug 2014
	▪ Volunteer of Spring Festival Railway Transport	Feb 2013
	▪ Volunteer of TORAY Cup Shanghai International Marathon	Dec 2011
INTERESTS	Anime, Comic and Games (ACG), Game Development, Outdoor Activities (Hiking, Camping, Mountain Climbing, Roller Skating, etc)	

[CV compiled on 2021-05-25]