

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 390+ 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 the unbiased TDE algorithm (CVPR 2020).
- 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.

	<ul style="list-style-type: none"> Github Link: https://github.com/KaihuaTang/VQA2.0-Recent-Approachs-2018.pytorch 2019
AWARDS & SCHOLARSHIPS	<ul style="list-style-type: none"> 2021 & 2019 PREMIA Best Student Paper Award, 2nd Place, PREMIA 2021, 2019 2020 Alibaba Outstanding Interns in Academic Cooperation, Alibaba Group 2020 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	<p>Alibaba, DAMO Academy, Research Intern, Hangzhou, China</p> <ul style="list-style-type: none"> Project: Robust Machine Learning Jul 2019- Now <p>Tencent, AI Lab, Research Intern, ShenZhen, China</p> <ul style="list-style-type: none"> Project: Scene Graph Generation Mar 2018- Jun 2018 <p>Mihoyo, Mobile Game Development Intern, Shanghai, China</p> <ul style="list-style-type: none"> Project: Mobile Game Development Using Unity 3D. Apr 2017- Dec 2017 <p>TOSHIBA Research & Development Intern, TOSHIBA, Tokyo, Japan</p> <ul style="list-style-type: none"> Project: Image Inpainting Aug 2015- Sep 2015
SKILLS	Recently Used: Python, Pytorch; Have Experience Before: MATLAB, C#, Java, C++,
LANGUAGES	<ul style="list-style-type: none"> Chinese: Native language, English: Fluent (TOEFL 103, GRE 328), Japanese: Basic (N2).
VOLUNTEER ACTIVITIES	<ul style="list-style-type: none"> 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 2021-05-21]