

Zhengkai Jiang

Address	Gumei Road 1528 Xuhui District, Shanghai	Website	jiangzhengkai.github.io
Email	kaikaijiang.jzk@gmail.com	Github	github.com/jiangzhengkai

Personal Profile

Self-motivated deep learning algorithm researcher at Tencent Youtu Lab. I have published several papers on top conferences such as NeurIPS, CVPR, ECCV and AAAI. My research interests mainly lie in object detection, video understanding and generative model.

Research Interest

- Object Detection, Instance Segmentation, Video Understanding, Image-to-Image Translation

Education

2017-2020 **University of Chinese Academy of Sciences,
National Laboratory of Pattern Recognition,
Institute of Automation, Chinese Academy of Sciences**
Master in Pattern Recognition and Intelligent System, Beijing, China
Overall GPA: 3.7/4.0, Ranking: **Top 5%**, Supervisor: Prof. Shiming Xiang
Fields: Computer Vision and Deep Learning

2013-2017 **Northeastern University**
Bachelor of Automation, Shenyang, China
Overall GPA: 91.3/100, Ranking: **1/37(2/248)**

Experience

Jul. 2020 - Now **Tencent Youtu Lab**
Full-Time Researcher, Shanghai, China
Topic: Image and Video Understanding

Apr. 2019 - Apr. 2020 **Megvii Research**
Research Intern, Beijing, China
Topic: General Object Detection, Mentored by Dr. Gang Yu and Zeming Li

Jan. 2018 - Mar. 2019 **Horizon Robotics**
Research Intern, Beijing, China
Topic: Video Object Detection, Mentored by Dr. Qian Zhang

Mar. 2017 - Sep. 2017 **Sensetime Research**
Research Intern, Beijing, China
Topic: Pedestrian Attribute Classification, Mentored by Dr. Jing Shao

Selected Projects

Jul. 2020 - Dec. 2020 **Gaze Redirection**

We propose a novel flow-based Ugaze network to redirect the gaze to the camera not the screen to improve the eye contact. World's first eye contact is online at Tencent Meeting

Publication

Conference

- **AutoAssign: Differentiable Label Assignment for Dense Object Detection**
Benjin Zhu, Jianfeng Wang, **Zhengkai Jiang**, Fuhang Zong, Songtao Liu, Zeming Li, Jian Sun
In Submission
- **Fine-Grained Dynamic Routing for Object Detection**
Lin Song, Yanwei Li, **Zhengkai Jiang**, Zeming Li, Hongbin Sun, Jian Sun, Nanning Zheng
Conference on Neural Information Processing Systems (NeurIPS), 2020
- **Rethinking Learnable Tree Filter for Generic Feature Transform**
Lin Song, Yanwei Li, **Zhengkai Jiang**, Zeming Li, Xiangyu Zhang, Hongbin Sun, Jian Sun, Nanning Zheng
Conference on Neural Information Processing Systems (NeurIPS), 2020
- **Learning Where to Focus for Efficient Video Object Detection**
Zhengkai Jiang, Yu Liu, Ceyuan Yang, Jihao Liu, Peng Gao, Qian Zhang, Shiming Xiang, Chunhong Pan
European Conference on Computer Vision (ECCV), 2020
- **Class-balanced Grouping and Sampling for Point Cloud 3D Object Detection**
Benjin Zhu, **Zhengkai Jiang**, Xiangxin Zhou, Zeming Li, Gang Yu
NuScenes Winner in IEEE Conference on Computer Vision and Pattern Recognition (CVPR) WAD Workshop, 2019
- **Dynamic Fusion with Intra- and Inter- Modality Attention Flow for Visual Question Answering**
Peng Gao, **Zhengkai Jiang**, Haoxuan You, Pan Lu, Steven Hoi, Xiaogang Wang, Hongsheng Li
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2019, **Oral**
- **Video Object Detection with Locally-Weighted Deformable Neighbours**
Zhengkai Jiang, Peng Gao, Chaoxu Guo, Qian Zhang, Shiming Xiang, Chunhong Pan
Association for the Advancement of Artificial Intelligence (AAAI), 2019

Academic Competitions

- **1st at the Objects 365 Challenge, 2020**
- **1st at the NuScenes 3D Detection of CVPR WAD workshop, 2019**
- **3rd at the Instance Segmentation of ECCV COCO Workshop, 2018**

Honors and Awards

- **Outstanding Student in Institution of Automation, Chinese Academy of Sciences, 2020**
- **Outstanding Student in Institution of Automation, Chinese Academy of Sciences, 2019**
- **Excellent Graduate in Liaoning Province, 2017**
- **1st class Scholarship of Northeastern University, 2014, 2016**
- **2nd Prize on National Mathematical Contest in Modeling(in China), 2015**
- **3st Prize on Final Chinese Mathematics Competitions(in Fuzhou, China), 2016**
- **1st Prize on Chinese Mathematics Competitions(in Shenyang, China), 2015**

- **2st Prize on Final Chinese Mathematics Competitions(in Wuhan, China), 2015**
- **1st Prize on Chinese Mathematics Competitions(in Shenyang, China), 2015**
- **National Scholarship (Top 0.2% students in China), 2016**
- **National Scholarship (Top 0.2% students in China), 2015**
- **National Scholarship (Top 0.2% students in China), 2014**

Professorial Services

Conference Reviewer

- **Association for the Advancement of Artificial Intelligence, 2021**
- **International Conference on Computer Vision and Pattern Recognition, 2021**

Journal Reviewer

- **International Journal of Computer Vision**

Skills

Programming Languages	Python, C++
Deep Learning Frameworks	PyTorch, Mxnet, Caffe
Backend Framework	CUDA, MPI
Languages	Chinese, English