

Xue Yang (杨学)

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Education

2012.09 ~ 2016.07	Central South University, Hunan	<i>Bachelor: Automation</i>
2016.09 ~ 2019.07	University of Chinese Academy of Sciences, Beijing	<i>Master: SIP</i>
2019.09 ~ 2023.07	Shanghai Jiao Tong University, Shanghai	<i>Ph.D.: CSE</i>
(expected)	MoE-AILab, SJTU	<i>Supervisor: <u>Prof. Junchi Yan</u></i>



Publications

Publication: 5 first author papers (ICML, CVPR, ICCV, ECCV, AAAI).

Citation: 700

Reviewer: CVPR, ACM MM; IJCV, TCSVT, TITS, GRSL

Google Scholar: <https://scholar.google.com/citations?user=2xTlvV0AAAAJ&hl=zh-CN>

Github: <https://github.com/yangxue0827>

Top-Tier Computer Vision Papers:

1. Rethinking Rotated Object Detection with Gaussian Wasserstein Distance Loss
Xue Yang, Junchi Yan, Qi Ming, Wentao Wang, Xiaopeng Zhang, Qi Tian
ICML 2021
2. Dense Label Encoding for Boundary Discontinuity Free Rotation Detection
Xue Yang, Liping Hou, Yue Zhou, Wentao Wang, Junchi Yan
CVPR 2021
3. R³Det: Refined Single-Stage Detector with Feature Refinement for Rotating Object
Xue Yang, Junchi Yan, Ziming Feng, Tao He
AAAI 2021
4. Arbitrary-Oriented Object Detection with Circular Smooth Label
Xue Yang, Junchi Yan
ECCV 2020
5. SCRDet: Towards More Robust Detection for Small, Cluttered and Rotated Objects
Xue Yang, Jirui Yang, Junchi Yan, Yue Zhang, Tengfei Zhang, Zhi Guo, Sun Xian, Kun Fu
ICCV 2019
6. Automatic Ship Detection in Remote Sensing Images from Google Earth of Complex Scenes Based on Multiscale Rotation Dense Feature Pyramid Networks
Xue Yang, Hao Sun, Kun Fu, Jirui Yang, Xian Sun, Menglong Yan, Zhi Guo
Remote Sensing, 2018 (**ESI Highly Cited Papers**)
7. Learning Modulated Loss for Rotated Object Detection
Wen Qian, **Xue Yang**, Silong Peng, Junchi Yan, Yue Guo
AAAI 2021
8. Rethinking Classification and Localization for Cascade R-CNN
Ang Li, **Xue Yang**, Chongyang Zhang
BMVC 2019

Preprints:

1. Learning High-Precision Bounding Box for Rotated Object Detection via Kullback-Leibler Divergence
Xue Yang, Xiaojiang Yang, Jirui Yang, Qi Ming, Wentao Wang, Qi Tian, Junchi Yan
2. On the Arbitrary-Oriented Object Detection: Classification based Approaches Revisited
Xue Yang, Junchi Yan, Tao He
3. SCRDet++: Detecting Small, Cluttered and Rotated Objects via Instance-Level Feature Denoising and

Rotation Loss Smoothing

Xue Yang, Junchi Yan, Xiaokang Yang, Jin Tang, Wenlong Liao, Tao He

4. Optimization for Oriented Object Detection via Representation Invariance Loss

Qi Ming, Zhiqiang Zhou, Lingjuan Miao, **Xue Yang**, Yunpeng Dong



Internship

2020.10 ~ 2021.07 **Huawei Cloud BU, EI Innovation Lab, Shenzhen**

Work with Prof. Qi Tian and Dr. Xiaopeng Zhang on rotated object detection, one paper is accepted by ICML 2021.

2018.12 ~ 2019.07 **Megvii (Face++), Detection Group, Beijing**

Work with Dr. Gang Yu on detection algorithms.

2017.04 ~ 2017.06 **Samsung Electronics Research Institute of China, Beijing**



Awards and Honors

2019 ~ Now Wu Wen Jun Honorary Doctoral Scholarship

2019 **1st Place** in WAD2019 Challenge on the D²-City & BDD100K Detection Domain Adaption track

2019 **3rd/4th Place** in DOAI2019 Challenge on the HBB/OBB track

2016-2019 Outstanding Student Leader, Outstanding Student, **Second Prize** in PMCM (2017)

2012-2016 Outstanding Student Leader, Outstanding Student, Outstanding Graduates, National Inspirational Scholarship, **Honorable Mention** in MCM/ICM (2015), **Second Prize** in APMCM (2016)



Academic Projects

1. **UranusDet: Rotation Detection Toolbox and Benchmark**

Github (359 star): <https://github.com/yangxue0827/RotationDetection>

UranusDet is an open source rotation detection toolbox based on Tensorflow.

2. **DetectionTeamUCAS**

Github (2.3k star): <https://github.com/DetectionTeamUCAS>

It contains many general detection and rotation detection algorithms that reimplemented by myself.

3. **R³Det: Refined Single-Stage Detector with Feature Refinement for Rotating Object**

Github (590 star): https://github.com/Thinklab-SJTU/R3Det_Tensorflow

<https://github.com/SJTU-Thinklab-Det/r3det-on-mmdetection>

A novel refined rotation detector accepted by AAAI 2021.