

# Xue Yang (杨学)

Phone: (+86) 156-0013-5866

Email: yangxue-2019-sjtu@sjtu.edu.cn

Homepage: <https://yangxue0827.github.io>



## 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 ~ Now	Shanghai Jiao Tong University, Shanghai MoE-AILab, SJTU	<i>Ph.D.: CSE</i> <i>Supervisor: <u>Prof. Junchi Yan</u></i>



## Publications

**Publication:** 5 first/co-first papers (ICML, CVPR, ICCV, ECCV, AAAI).

**Citation:** 662

**Reviewer:** CVPR, 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. R<sup>3</sup>Det: 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. On the Arbitrary-Oriented Object Detection: Classification based Approaches Revisited  
**Xue Yang**, Junchi Yan, Tao He
2. 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

3. Optimization for Oriented Object Detection via Representation Invariance Loss  
Qi Ming, Zhiqiang Zhou, Lingjuan Miao, **Xue Yang**, Yunpeng Dong
4. Parallel Multi-Resolution Fusion Network for Image Inpainting  
WenTao Wang, Jianfu Zhang, Li Niu, Haoyu Ling, **Xue Yang**, Liqing Zhang
5. Towards High-Quality Oriented Object Detection with Fine-Grained Localization Guidance  
Qi Ming, Zhiqiang Zhou, Lingjuan Miao, Yunpeng Dong, **Xue Yang**, YusenLin



## 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 **1<sup>st</sup> Place** in WAD2019 Challenge on the D<sup>2</sup>-City & BDD100K Detection Domain Adaption track
- 2019 **3<sup>rd</sup>/4<sup>th</sup> 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 (282 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. **R<sup>3</sup>Det: Refined Single-Stage Detector with Feature Refinement for Rotating Object**  
Github (572 star): [https://github.com/Thinklab-SJTU/R3Det\\_Tensorflow](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.