

Jun CEN
Robotics and Autonomous Systems
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Degree	University	Major	Year	Supervisor	GPA
PhD	HKUST	Robotics	2020-now	Qifeng Chen, Michael Wang	3.98/4.3
MSc	HKUST	Mechanical	2019-20	Lilong Cai	3.99/4.3
Bachelor	Zhejiang University	Mechatronics	2015-19	Jinghua Xu	3.82/4.0

Research Interests

- **Life-long Learning:** *open-set recognition* and *incremental learning* in 2D/3D semantic segmentation, 3D object detection, image/video recognition, etc.

Publication

- [1]. **CMDFusion: Bidirectional Fusion Network with Cross-modality Knowledge Distillation for LIDAR Semantic Segmentation**
Jun CEN, Shiwei Zhang, Yixuan Pei, Kun Li, Hang Zheng, Maochun Luo, Yingya Zhang, Qifeng Chen
[[Under Review](#)]
- [2]. **Enlarge Instance-specific and Class-specific Information for Open-set Action Recognition**
Jun CEN, Shiwei Zhang, Xiang Wang, Yixuan Pei, Zhiwu Qing, Yingya Zhang, Qifeng Chen
Computer Vision and Pattern Recognition Conference [[CVPR 2023](#)]
- [3]. **The Devil is in the Wrongly-classified Samples: Towards Unified Open-set Recognition**
Jun CEN*, Di Luan*, Shiwei Zhang, Yixuan Pei, Yingya Zhang, Deli Zhao, Shaojie Shen, Qifeng Chen
International Conference on Learning Representations 2023 [[ICLR 2023](#)]
- [4]. **Learning a Condensed Frame for Memory-Efficient Video Class-Incremental Learning**
Yixuan Pei, Zhiwu Qing, Jun CEN, Xiang Wang, Shiwei Zhang, Yaxiong Wang, Mingqian Tang, Nong Sang, Xueming Qian
Conference on Neural Information Processing Systems 2022 [[NeurIPS 2022](#)]
- [5]. **Open-world Semantic Segmentation for LIDAR Point Clouds**
Jun Cen, Peng Yun, Shiwei Zhang, Junhao Cai, Di Luan, Mingqian Tang, Michael Yu Wang, Ming Liu
European Conference on Computer Vision 2022 [[ECCV 2022](#)]
- [6]. **Real-Time Collision-Free Grasp Pose Detection With Geometry-Aware Refinement Using High-Resolution Volume**
Junhao Cai, Jun Cen, Haokun Wang, Michael Yu Wang
Robotics and Automation Letters 2022 [[ICRA with R-AL 2022](#)]
- [7]. **Open-set 3D Object Detection**
Jun Cen, Peng Yun, Junhao Cai, Michael Yu Wang, Ming Liu
International Conference on 3D Vision 2021 [[3DV 2021](#)]
- [8]. **Conflicts between Likelihood and Knowledge Distillation in Task Incremental Learning for 3D Object Detection**
Peng Yun, Jun Cen, Ming Liu
International Conference on 3D Vision 2021 [[3DV 2021](#)]
- [9]. **Deep Metric Learning for Open World Semantic Segmentation**
Jun Cen, Peng Yun, Junhao Cai, Michael Yu Wang, Ming Liu
International Conference on Computer Vision 2021 [[ICCV 2021](#)]
- [10]. **BORM: Bayesian Object Relation Model for Indoor Scene Recognition**
Liguang Zhou, Jun Cen, Xingchao Wang, Zhenglong Sun, Tin Lun Lam, Yangsheng Xu
International Conference on Robotics and Systems 2021 [[IROS 2021](#)]

[11]. Precision forward design for 3D printing using kinematic sensitivity via Jacobian matrix considering uncertainty
Jinghua Xu, Xueqing Feng, Jun Cen, Shuyou Zhang
The International Journal of Advanced Manufacturing Technology 2020

Professional Service

- Reviewer for T-PAMI, CVPR, ICRA, IROS, JAS (中国自动化学报)

Experience

- MMLab, Nanyang Technological University (Mar'23-Aug'23)
 - Visiting Student, supervised by Prof. Ziwei Liu
- DAMO Academy, Alibaba Group (Mar'22-Mar'23)
 - Research Intern, supervised by Dr. Shiwei Zhang
- Robotics and Artificial Intelligence Laboratory, The Chinese University of Hong Kong (SZ) (Oct'19-Jan'20)
 - Research Assistant, supervised by Prof. Tin Lun Lam
- Autonomous Driving Group, HIKVISION (Mar'20-Jul'20)
 - Algorithm Engineer, supervised by Dr. Yushi Zhu

Patents

- 行为识别方法、装置、设备和存储介质, 岑俊、张士伟、吕逸良、赵德丽, 中国发明专利 (已授权), 202210952356X
- 视频处理方法及设备, 岑俊、裴逸璇、张士伟、吕逸良、赵德丽, 中国发明专利 (已授权), 202211099158X