

Jiawei Ren

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EDUCATION

Ph.D. Student, Nanyang Technological University

2021 - 2025 (expected)

- Computer Science, supervised by Prof. Ziwei Liu
- Focus on long-tailed learning, 3D representation learning and 3D human.

B.Eng, Nanyang Technological University

2015 - 2019

- Electrical and Electronic Engineering, Highest Distinction (GPA 4.9/5)

PROFESSIONAL EXPERIENCE

Algorithm Engineer

July 2019 - July 2021

SenseTime Research, Singapore

- Developed a SMPL-based API that converts motion from video to animated 3D avatars with physical plausibility.
- Developed the Panoptic Segmentation framework for SenseTime's internal toolbox.
- Developed the data processing pipeline for an smart casino project (Resorts World Sentosa Casino).

PREPRINT

Benchmarking and Analyzing Point Cloud Classification under Corruptions

J. Ren, L. Pan, Z. Liu

- [arXiv](#), [Code](#), [Project Page](#)

Playing for 3D Human Recovery

Z. Cai, M. Zhang*, J. Ren*, C. Wei, D. Ren, J. Li, Z. Lin, H. Zhao, , S. Yi, L. Yang, C. Loy, Z. Liu*

- [arXiv](#), [Code](#), [Project Page](#)

PUBLICATION

Balanced MSE for Imbalanced Visual Regression

J. Ren, C. Yu, M. Zhang, Z. Liu

- IEEE Conference on Computer Vision and Pattern Recognition (**CVPR 2022 Oral**)
- [arXiv](#), [Code](#), [Project Page](#)

REFINE: Prediction Fusion Network for Panoptic Segmentation

J. Ren, C. Yu*, Z. Cai*, C. Chen, M. Zhang, H. Zhao, S. Yi, H. Li*

- Thirty-Fifth AAAI Conference on Artificial Intelligence (**AAAI 2021**)
- 1st place solution of ICCV 2019 COCO Panoptic Segmentation Challenge
- [Project Page](#)

Balanced Meta-Softmax for Long-Tailed Visual Recognition

J. Ren, C. Yu, S. Sheng, X. Ma, H. Zhao, S. Yi, H. Li

- Conference on Neural Information Processing Systems 2020 (**NeurIPS 2020**)
- Spotlight at ECCV 2020 COCO+LVIS Workshop
- [arXiv](#), [Code](#), [Project Page](#)

Spatio-Temporal Graph Transformer Networks for Pedestrian Trajectory Prediction

C. Yu, X. Ma*, J. Ren, H. Zhao, S. Yi*

- European Conference on Computer Vision 2020 (**ECCV 2020**)
- [arXiv](#), [Code](#), [Project Page](#), [Video](#)

AWARDS

AISG PhD Fellowship

2021

Dean's List (top 5% of the cohort)

2016, 2017, 2019

Singapore Ministry of Education Engineering & Science Full Scholarship

2014