

Cunjun Yu

Email: cunjun.yu@comp.nus.edu.sg Personal Page: cjuu.me

EDUCATION

Nanyang Technological University, Singapore

2015 - 2019

- Bachelor of Mechanical Engineering (Highest Distinction), Mechatronics and Robotics
- Singapore Ministry of Education Engineering & Science Full Scholarship

PROFESSIONAL EXPERIENCE

Research Assistant

Dec. 2020 - Present, Singapore

National University of Singapore, AdaComp Lab, advised by Professor David Hsu

- Built up a novel graph-based spatial relationship reasoning framework for robotic arm grasping of objects in clutter
- Enabling robot to teach human beings to write Chinese characters via style transfer and human-robot interaction

Algorithm Researcher

July 2019 - Sept. 2020, Singapore

SenseTime International Pte. Ltd.

- Initiated a novel framework to achieve high-quality panoptic segmentation by improving cross-task prediction fusion
- Came up with a pure attention-based method for inter-human interaction reasoning and achieved the state-of-the-art performance for trajectory prediction
- Developed and maintained a set of C++ software development toolkit for fast and accurate Human-Object Interaction Detections

PUBLICATIONS

INVIGORATE: Interactive Visual Grounding and Grasping in Clutter

H. Zhang*, Y. Lu*, C. Yu, D. Hsu, X. Lan, N. Zheng

- Robotics: Science and Systems (RSS 2021)
- [Video](#)

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)

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

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](#)

MessyTable: Instance Association in Multiple Camera Views

Z. Cai, J. Zhang, D. Ren, C. Yu, H. Zhao, S. Yi, C. K. Yeo, C. C. Loy

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

Siamese Convolutional Neural Network for Sub-millimeter-accurate Camera Pose Estimation and Visual Servoing,

C. Yu*, Z. Cai*, H. Pham, Q.C. Pham

- International Conference on Intelligent Robots and Systems 2019 (IROS 2019)

AWARDS

3rd Place, Waymo 3D Object Detection Domain Adaptation Challenge

2020

Waymo Open Dataset Challenge Workshop at CVPR 2020

3rd Place, Open Images 2019 - Object Detection Challenge

2019

Open Images 2019 Challenge Workshop at ICCV 2019

5th Place, Open Images 2019 - Visual Relationship Challenge

2019

Open Images 2019 Challenge Workshop at ICCV 2019

Champion, COCO Panoptic Segmentation Challenge

2019

COCO + Mapillary Joint Recognition Challenge Workshop at ICCV 2019