

Jie Hu

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RESEARCH INTERESTS

2D-3D Representation Learning, Scene Understanding and Generation

EDUCATION

Ph.D. in Computer Science and Technology September 2019 - July 2023
Xiamen University
Advisor: Prof. Rongrong Ji

M.S. in Pattern Recognition and Intelligent System September 2017 - July 2019
Xiamen University
Advisor: Prof. Rongrong Ji

B.S. in Automation September 2013 - July 2017
North University of China

PUBLICATION

Jie Hu, Yao Lu, Shengchuan Zhang, Liujuan Cao. ISTR: Mask-Embedding-Based Instance Segmentation Transformer. *IEEE Transactions on Image Processing (TIP)*, 2024.

Jie Hu, Linyan Huang, Tianhe Ren, Shengchuan Zhang, Rongrong Ji, Liujuan Cao. You Only Segment Once: Towards Real-Time Panoptic Segmentation. In *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2023.

Jie Hu*, Chen Chen*, Liujuan Cao, Shengchuan Zhang, Annan Shu, Guannan Jiang, Rongrong Ji. Pseudo-label Alignment for Semi-supervised Instance Segmentation. In *IEEE/CVF International Conference on Computer Vision (ICCV)*, 2023. (*Equal Contribution)

Suhang Ye*, Yingyi Zhang*, **Jie Hu***, Liujuan Cao, Shengchuan Zhang, Lei Shen, Jun Wang, Shouhong Ding, Rongrong Ji. DistilPose: Tokenized Pose Regression with Heatmap Distillation. In *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2023. (*Equal Contribution)

Jie Hu, Liujuan Cao, Qixiang Ye, Tong Tong, Shengchuan Zhang, Ke Li, Feiyue Huang, Rongrong Ji, Ling Shao. Architecture Disentanglement for Deep Neural Networks. In *IEEE/CVF International Conference on Computer Vision (ICCV, oral)*, 2021.

Jie Hu, Rongrong Ji, Shengchuan Zhang, Xiaoshuai Sun, Qixiang Ye, Chia-Wen Lin, Qi Tian. Information Competing Process for Learning Diversified Representations. In *Neural Information Processing Systems (NeurIPS)*, 2019.

Jie Hu, Rongrong Ji, Hong Liu, Shengchuan Zhang, Cheng Deng, Qi Tian. Towards Visual Feature Translation. In *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2019.

Haixin Ding, Shengchuan Zhang, Qiong Wu, Songlin Yu, **Jie Hu**, Liujuan Cao, Rongrong Ji. Bilateral Knowledge Interaction Network for Referring Image Segmentation. *IEEE Transactions on Multimedia (TMM)*, 2024.

Xinyang Li, Shengchuan Zhang, **Jie Hu**, Liujuan Cao, Xiaopeng Hong, Xudong Mao, Feiyue Huang, Yongjian Wu, Rongrong Ji. Image-to-image Translation via Hierarchical Style Disentanglement. In *IEEE/CVF Conference on Computer Vision*

and Pattern Recognition (CVPR, oral), 2021.

Shengchuan Zhang, Rongrong Ji, **Jie Hu**, Xiaoqiang Lu, Xuelong Li. Face Sketch Synthesis by Multidomain Adversarial Learning. *IEEE Transactions on Neural Networks and Learning Systems (TNNLS)*, 2018.

Shengchuan Zhang, Rongrong Ji, **Jie Hu**, Yue Gao, Chia-Wen Lin. Robust Face Sketch Synthesis via Generative Adversarial Fusion of Priors. In *International Joint Conference on Artificial Intelligence (IJCAI)*, 2018.

EXPERIENCE

AI for Smart Manufacturing July 2023 - now
Engineer and Post-doc Researcher at CATL, Ningde, China

Application on Instance Segmentation January 2022 - June 2022
Intern at CATL, Ningde, China

Application on Face Parsing and Editing June 2019 - August 2019
Intern at Tencent Youtu Lab, Shanghai, China

SERVICE

Journal Reviewer

- IEEE TPAMI
- IJCV

Conference Reviewer

- NeurIPS'23
- ICCV'23
- ICLR'24
- CVPR'22, CVPR'23, CVPR'24
- ACM MM'21, ACM MM'22, ACM MM'23, ACM MM'24
- ECCV'22, ECCV'24

AWARDS

Xiamen University Scholarship, 2019

The ACM-ICPC Asia Regional Contest, Hefei Site, Bronze Medal, 2015