

# 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