

Chaoyang Zhu

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Education

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- Hong Kong University of Science and Technology (QS Ranking: 47)** Sep. 2023 – Now
PhD in Computer Science and Engineering
- **Supervisor:** [Prof. Long Chen](#)
 - **Research Topic:** Open-Vocabulary Perception, 3D Reconstruction and Modeling
- Xiamen University (Project 985 and Double First-Class in China)** Sep. 2020 – Jul. 2023
Master in Computer Science
- **Supervisor:** [Prof. Rongrong Ji](#)
 - **Research Topic:** Image Segmentation, Visual Grounding, Visual Question Answering, Multi-modal Learning
- Hangzhou Dianzi University** Sep. 2015 – Jul. 2019
Bachelor in Computer Science
- **Supervisor:** [Prof. Jun Yu](#)
 - **Research Topic:** Place Recognition

Research Experiences

Learning to Compose Quasi-Words for Open-Vocabulary Part Segmentation
submitted to **Neural Information Processing Systems (NeurIPS)**, 2024
Chaoyang Zhu, Long Chen*

[Deep Instruction Tuning for Segment Anything Model](#)

ACM Multimedia (MM), 2024
Xiaorui Huang, Gen Luo, *Chaoyang Zhu*, Bo Tong, Yiyi Zhou*, Xiaoshuai Sun, Rongrong Ji

[A Survey on Open-Vocabulary Detection and Segmentation: Past, Present, and Future](#)

IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2024
Chaoyang Zhu, Long Chen*

[SeqTR: A Simple Yet Universal Network for Visual Grounding](#)

European Conference on Computer Vision (ECCV), Oral, Top 2.7%, 100+ citations, 2022
Chaoyang Zhu, Yiyi Zhou, Yunhang Shen, Gen Luo, Xingjia Pan, Mingbao Lin, Chao Chen, Liujuan Cao*, Xiaoshuai Sun, Rongrong Ji

[TRAR: Routing the Attention Spans in Transformer for Visual Question Answering](#)

International Conference on Computer Vision (ICCV), 2021
Yiyi Zhou, Tianhe Ren, *Chaoyang Zhu*, Xiaoshuai Sun*, Jianzhuang Liu, Xinghao Ding, Mingliang Xu, Rongrong Ji

[Spatial Pyramid-Enhanced NetVLAD with Weighted Triplet Loss for Place Recognition](#)

IEEE Transactions on Neural Networks and Learning Systems (TNNLS), 300+ citations, 2019
Jun Yu, *Chaoyang Zhu*, Jian Zhang*, Qingming Huang, Dacheng Tao

Internship

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- Youtu Lab at Tencent, Shanghai** Jul. 2021 - Apr. 2022
- IVIS Challenge Workshop at ICCV 2021: Technical Report: Mining, Augmentation, and Refinement: Improving Long-tailed Instance Segmentation via Tri-level Enhancement**
- Smart City Business Support: Reproducing and delivering image segmentation models based on the Detectron2 framework, covering multiple smart scene scenarios such as dense fog and exam cheating detection.

Additional Services and Awards

Teaching Assistant (2024): [Advanced Topics in Multi-modal Machine Learning](#), [Reinforcement Learning](#)

Conference/Journal Reviewers: NeurIPS, ECCV, ICML, MM, TMM, TCSVT

Outstanding Postgraduate Student by Xiamen University 2023

The Star of Future Award by Youtu Lab 2022

Outstanding Graduate Student by Hangzhou Dianzi University 2019