

Zhiqiang Yan

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[homepage](#)

EDUCATION EXPERIENCE

2020.09 – 2024.06: Nanjing University of Science and Technology (Nanjing, China)
Ph.D. Candidate of Computing (Supervisor: Prof. **Jian Yang** and **Jun Li**)

2014.09 – 2018.06: Nanjing University of Science and Technology (Nanjing, China)
B.S. of Automation

RESEARCH INTEREST

My research interests lie in computer vision and machine learning, with a focus on depth-related tasks: depth completion, depth estimation, and depth super-resolution. These tasks are essential for 3D reconstruction, scene understanding, and autonomous driving.

FULL PUBLICATION LIST

Accepted Papers:

1. **Zhiqiang Yan**, Yuankai Lin, Kun Wang, Yupeng Zheng, Yufei Wang, Zhenyu Zhang, Jun Li, and Jian Yang. Tri-Perspective View Decomposition for Geometry-Aware Depth Completion. In *CVPR 24*, [rank 1st on [KITTI leaderboard at submission](#)], [new dataset], [TOF system on smartphones]
2. **Zhiqiang Yan**, Xiang Li, Kun Wang, Shuo Chen, Jun Li, and Jian Yang. Distortion and Uncertainty Aware Loss for Panoramic Depth Completion. In *ICML 23*, [new SOTA]
3. **Zhiqiang Yan**, Kun Wang, Xiang Li, Zhenyu Zhang, Jun Li, and Jian Yang. DesNet: Decomposed Scale-Consistent Network for Unsupervised Depth Completion. In *AAAI 23*, [rank 1st on [KITTI leaderboard \(unsupervised\) at submission](#)], Oral Presentation
4. **Zhiqiang Yan**, Kun Wang, Xiang Li, Zhenyu Zhang, Jun Li, and Jian Yang. RigNet: Repetitive Image Guided Network for Depth Completion. In *ECCV 22*, [rank 1st on [KITTI leaderboard at submission](#)]
5. **Zhiqiang Yan**, Xiang Li, Kun Wang, Zhenyu Zhang, Jun Li, and Jian Yang. Multi-Modal Masked Pre-Training for Monocular Panoramic Depth Completion. In *ECCV 22*, [new task]
6. **Zhiqiang Yan**, Kun Wang, Xiang Li, Zhenyu Zhang, Guangyu Li, Jun Li, and Jian Yang. Learning Complementary Correlations for Depth Super-Resolution with Incomplete Data in Real World. In *TNNLS 22*, [new task]
7. Zhengxue Wang, **Zhiqiang Yan**, and Jian Yang. SGNet: Structure Guided Network via Gradient-Frequency Awareness for Depth Map Super-Resolution. In *AAAI 24*, [new SOTA]

[on all datasets](#)], *Corresponding Author*

8. Kun Wang, **Zhiqiang Yan**, Huang Tian, Zhenyu Zhang, Xiang Li, Jun Li, and Jian Yang. AltNeRF: Learning Robust Neural Radiance Field via Alternating Depth-Pose Optimization. In *AAAI 24*.

9. Kun Wang, Zhenyu Zhang, **Zhiqiang Yan**, Xiang Li, Baobei Xu, Jun Li, and Jian Yang. Regularizing Nighttime Weirdness: Efficient Self-Supervised Monocular Depth Estimation in the Dark. In *ICCV21*, [\[new task\]](#)

Submitted Papers:

1. Zhengxue Wang*, **Zhiqiang Yan***, Ming-Hsuan Yang, Jinshan Pan, Jian Yang, Ying Tai, and Guangwei Gao. Scene Prior Filtering for Depth Map Super-Resolution. To *ECCV24*, [\[new SOTA\]](#), [\[large vision model priors\]](#), *Corresponding Author*

2. **Zhiqiang Yan**, Xiang Li, Le Hui, Zhenyu Zhang, Jun Li, and Jian Yang. RigNet++: Semantic Assisted Repetitive Image Guided Network for Depth Completion. To *IJCV24*, [\[new SOTA\]](#)

3. **Zhiqiang Yan**, Zhijie Shen, Xiang Li, Zhenyu Zhang, Jun Li, and Jian Yang. PanoKernel: Large Distortion-aware Kernel for Panoramic Depth Perception. To *ICML 24*, [\[new backbone\]](#)

4. **Zhiqiang Yan**, Yupeng Zheng, Chongyi Li, Jun Li, and Jian Yang. Learnable Differencing Center for Nighttime Depth Perception. To *TPAMI 23*, [\[new task\]](#)

CONFERENCE REVIEWER

IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**): 2021, 2022, 2024

AAAI Conference on Artificial Intelligence (**AAAI**): 2022, 2023, 2024

International Conference on Computer Vision (**ICCV**): 2021, 2023

European Conference on Computer Vision (**ECCV**): 2022, 2024

International Conference on 3D Vision (**3DV**): 2022

Asian Conference on Computer Vision (**ACCV**): 2024

AWARDS

2022.10: Hua Wei Scholarship (**Top 1%**)

2023.10: National Scholarship (**Top 2%**)

REFERENCE

Prof. **Jian Yang**, PCA Lab, Nanjing University of Science and Technology, & Nanjing University. Email: csjyang@njust.edu.cn, Google Scholar: [google scholar](#)

Prof. **Jun Li**, PCA Lab, Nanjing University of Science and Technology. Email: junli@njust.edu.cn, Homepage: <https://sites.google.com/view/junlineu/>