# **Zhiqiang Yan**

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### **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 analysis & understanding, and autonomous driving. Moreover, I am also fascinated by the task of 3D occupancy prediction.

#### **FULL PUBLICATION LIST**

#### **Accepted Papers:**

- 1. **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]
- 2. **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
- 3. **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 <u>KITTI</u> leaderboard at submission]
- 4. **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]
- 5. **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]
- 6. Zhengxue Wang, **Zhiqiang Yan**, and Jian Yang. SGNet: Structure Guided Network via Gradient-Frequency Awareness for Depth Map Super-Resolution. In **AAAI24**, [new SOTA on all datasets], **Corresponding Author**
- 7. 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 *AAAI24*.

8. 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 *ICCV* 21, [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/