

# Yakun Ju

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## EDUCATION

- **Ocean University of China - School of Computer Science and Technology** Qingdao, China  
*Doctor of Philosophy in Computer Science* Sept. 2016 - Jun. 2022
- **Sichuan University - School of Mechanical Engineering** Chengdu, China  
*Bachelor of Engineering in Industrial Design* Sept. 2012 - Jun. 2016

## EXPERIENCE

- **The Hong Kong Polytechnic University** Hong Kong SAR  
*Postdoctoral Fellow - Department of Electronic and Information Engineering* Sept. 2022 - Present
- **The Hong Kong Polytechnic University** Hong Kong SAR  
*Research Assistant - Department of Electronic and Information Engineering/Computing* Jan. 2021 - Jul. 2021
- **Peking University** Beijing, China  
*Visiting Ph.D. Student - Wangxuan Institute of Computer Technology* Sept. 2020 - Dec. 2020

## HONORS

- ACM Qingdao Outstanding Doctoral Dissertation Award - Sept. 2022
- Outstanding Graduates of Shandong Province - Jun. 2022
- Inspur Scholarship - Dec. 2021
- National Scholarship for Doctoral Students - Dec. 2020
- Excellent Achievement Award for Postgraduates of Shandong Province - Dec. 2020
- Goers Acoustic Scholarship - Dec. 2017
- Excellent Postgraduate Student of Ocean University of China - 2018, 2019, 2020, 2021

## PUBLICATION

- **Yakun Ju**, Boxin Shi, Muwei Jian, *et al.* NormAttention-PSN: A High-frequency Region Enhanced Photometric Stereo Network with Normalized Attention, International Journal of Computer Vision (**IJCV**), 2022.
- **Yakun Ju**, Junyu Dong, Sheng Chen. Recovering surface normal and arbitrary images: A dual regression network for photometric stereo, IEEE Transactions on Image Processing (**IEEE TIP**), 2021.
- **Yakun Ju**, Kin-Man Lam, Yang Chen, *et al.* Pay attention to devils: A photometric stereo network for better details, International Conference on International Joint Conferences on Artificial Intelligence (**IJCAI 2020**).
- **Yakun Ju**, Muwei Jian, Shaoxiang Guo, *et al.* Incorporating Lambertian Priors into Surface Normals Measurement, IEEE Transactions on Instrumentation and Measurement (**IEEE TIM**), 2021.
- **Yakun Ju**, Xinghui Dong, Yingyu Wang, *et al.* A Dual-cue Network for Multispectral Photometric Stereo, Pattern Recognition (**PR**), 2020.
- **Yakun Ju**, Lin Qi, Jichao He, *et al.* MPS-Net: Learning to recover surface normal for multispectral photometric stereo, Neurocomputing, 2020.
- **Yakun Ju**, Yuxin Peng, Muwei Jian, *et al.* Learning Conditional Photometric Stereo with High-resolution Features, Computational Visual Media (**CVMJ**), 2022.
- **Yakun Ju**, Lin Qi, Huiyu Zhou, *et al.* Demultiplexing colored images for multispectral photometric stereo via deep neural networks, IEEE Access, 2018.
- **Yakun Ju**, Muwei Jian, Junyu Dong, *et al.* Learning photometric stereo via manifold-based mapping, IEEE International Conference on Visual Communications and Image Processing (**IEEE VCIP 2020**).
- **Yakun Ju**, Lin Qi, Hao Fan, *et al.* Photometric stereo via random sampling and tensor robust principal component analysis, International Conference on Graphic and Image Processing (**ICGIP 2017**).
- Yanru Liu, **Yakun Ju (corresponding author)**, Muwei Jian, *et al.* A deep-shallow and global-local multi-feature fusion network for photometric stereo, Image and Vision Computing (**IVC**), 2022.
- Yingyu Wang, **Yakun Ju**, Muwei Jian, *et al.* Self-supervised depth completion with attention-based loss, International Workshop on Advanced Imaging Technology (**IWAIT 2020**).
- Shaoxiang Guo, Eric Rigall, **Yakun Ju**, *et al.* 3D Hand Pose Estimation from Monocular RGB with Feature Interaction Module, IEEE Transactions on Circuits and Systems for Video Technology (**IEEE TCSVT**), 2022.
- Yuan Rao, Jian Yang, **Yakun Ju**, *et al.* Learning General Feature Descriptor for Visual Measurement With Hierarchical View Consistency, IEEE Transactions on Instrumentation and Measurement (**IEEE TIM**), 2022.
- Hao Fan, Lin Qi, **Yakun Ju**, *et al.* Refractive laser triangulation and photometric stereo in underwater environment, Optical Engineering (**OE**), 2017.

## INVENTION PATENT

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- **Yakun Ju**, Junyu Dong, Lin Qi, *et al.* *A Single Frame Image 3D Reconstruction Device and Method Based on Deep Learning*, Granted invention patent in China, 2017113024008.
- **Yakun Ju**, Junyu Dong, Feng Gao. *High-frequency Region Enhancement Photometric Stereo Method Based on Deep Learning*, Granted invention patent in China, 202111524515.
- Muwei Jian, Rui Wang, Xing Wang, **Yakun Ju**, *et al.* *Transform-based face image super-resolution method*, Granted invention patent in China, 2021106623438.
- Muwei Jian, Rui Wang, Xing Wang, Ji Chen, **Yakun Ju**, *et al.* *Low-resolution face super-resolution and recognition method based on face priori knowledge*, Granted invention patent in China, 202110510886.

## TALK

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- Data-Driven Photometric Stereo, **Shenzhen University**, Sept. 2022
- Data-driven Photometric Stereo, **CCF-Annual Conference on Chinese Intelligent Robots**, Dec. 2021
- Workshop5 (3D Vision)-Top Paper Spotlight, **Vision And Learning SEminar(VALSE)**, Oct. 2021.
- Research on Data-Driven Photometric Stereo, **IJCAI-SAIA Young Elite Symposium**, Jul. 2021.

## PROFESSIONAL SERVICE

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- **Guest Editor:** Photonics-SI: "Advanced Photometric 3D Reconstruction and beyond".  
[https://www.mdpi.com/journal/photonics/special\\_issues/604639UE1N](https://www.mdpi.com/journal/photonics/special_issues/604639UE1N)
- **Journal Reviewer:** IJCV, IEEE TIP, IEEE TIE, PR, KBS, Photonics, Scientific Report

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