

# LANYUN ZHU

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## EDUCATION

<b>Singapore University of Technology and Design (SUTD)</b>	Singapore
<i>Ph.D. in Information Systems and Technology Design (ISTD)</i>	2021.9 -
Advisor: <a href="#">Prof. Jun Liu</a>	
<b>Beihang University (BUAA)</b>	Beijing, China
<i>B.S. in Information Engineering</i>	2016.9 - 2020.6

## RESEARCH DIRECTIONS

Computer Vision, Image Segmentation

## SELECTED PUBLICATIONS

For the full list, please see my [Google Scholar page](#)

### Conference Papers

- **Lanyun Zhu**, Tianrun Chen, Jianxiong Yin, Simon See, Jun Liu, “Learning Gabor Texture Features for Fine-Grained Recognition”, *International Conference on Computer Vision (ICCV)*, 2023.
- **Lanyun Zhu**, Tianrun Chen, Jianxiong Yin, Simon See, Jun Liu, “Continual Semantic Segmentation with Automatic Memory Sample Selection”, *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2023. [\[paper\]](#)
- **Lanyun Zhu**, Deyi Ji, Shiping Zhu, Weihao Gan, Wei Wu, Junjie Yan, “Learning Statistical Texture for Semantic Segmentation”, *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2021. [\[paper\]](#) [\[code\]](#)
- Xiao Fu, Shangzhan Zhang, Tianrun Chen, Yichong Lu, **Lanyun Zhu**, Xiaowei Zhou, Andreas Geiger, Yiyi Liao. “Panoptic NeRF: 3D-to-2D Label Transfer for Panoptic Urban Scene Segmentation”, *International Conference on 3D Vision (3DV)*, 2022 [\[paper\]](#) [\[project\]](#)

### Journal Papers

- Yan Wang, Jian Cheng, Yixin Chen, Shuai Shao, **Lanyun Zhu**, Zhenzhou Wu, Tao Liu, Haogang Zhu. “FVP: Fourier Visual Prompting for Source-Free Unsupervised Domain Adaptation of Medical Image Segmentation”, *IEEE Transactions on Medical Imaging* (Minor Revision) [\[paper\]](#)
- Zhikang Liu\*, **Lanyun Zhu**\*. “Label-guided Attention Distillation for Lane Segmentation”, *Neurocomputing* [\[paper\]](#)

### Preprint Papers

- Tianrun Chen\*, **Lanyun Zhu**\*, Chaotao Ding, Runlong Cao, Shangzhan Zhang, Yan Wang, Zejian Li, Lingyun Sun, Papa Mao, Ying Zang. “SAM Fails to Segment Anything? – SAM-Adapter: Adapting SAM in Underperformed Scenes: Camouflage, Shadow, Medical Image Segmentation, and More”, *Arxiv Preprint* [\[paper\]](#) [\[code\]](#) ([Github 520 Stars](#))

\* indicates equal contribution.

## INTERN EXPERIENCES

<b>Johns Hopkins University</b>	Research Intern, Jul 2021-Aug 2021
Brief introduction: Working on research project about using depth estimation to enhance semantic segmentation, advised by Prof. Alan Yuille.	
<ul style="list-style-type: none"><li>• Implementing a multi-task model to enhance semi-supervised segmentation by using depth estimation as a joint task.</li><li>• Achieving 3% improvement compared with SOTA</li></ul>	

<b>Sensetime</b>	Research Intern, Jun 2020-Jul 2021
Brief introduction: Working on research works and engineering projects about semantic segmentation.	
<ul style="list-style-type: none"><li>• Designing models for soot area segmentation, achieving 64% mIoU.</li><li>• Completing a paper about semantic segmentation published on CVPR2021.</li></ul>	

## Megvii

Research Intern, Sep 2019-May 2020

Brief introduction: Working on research works and engineering projects about semantic segmentation and lane line detection.

- Designing models for lane line detection used for traffic condition monitoring.
- Completing a paper about lane line detection published on Neurocomputing.

## ACADEMIC SERVICE

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### Conference Reviewer

- Advances in Neural Information Processing Systems (NeurIPS)
- International Conference on Machine Learning (ICML)
- ACM International Conference on Multimedia (ACM MM)

### Journal Reviewer

- IEEE Transactions on Image Processing (TIP)
- IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
- IEEE Transactions on Industrial Informatics (TII)

## SKILLS

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- Programming Languages: Python > MATLAB == C
- Deep Learning Framework: PyTorch » Tensorflow

## SELECTED HONORS AND AWARDS

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First Prize, Fengru Cup 2019 (Top 2%, 2/100+)	2019
<i>1<sup>st</sup> Class</i> Scholarship for Academic Achievements, BUAA	2019
Second Prize, Fengru Cup 2020 (Top 10%)	2020
Honorable Mention, Mathematical Contest In Modeling	2019
AISG Ph.D. Fellowship	2021 – Present