# GONGYANG LI

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#### **EDUCATION**

• Visiting Ph.D. Student, Nanyang Technological University, Singapore

07/2021 - Now

- Major in Computer Vision
- Advisor: Professor Weisi Lin (IEEE/IET Fellow)
- Ph.D. Student, Shanghai University, Shanghai, China

09/2016-Now

- Successive Master-Doctor Program
- Major in Signal and Information Processing
- Advisor: Professor Zhi Liu

• B.S., Shanghai Normal University, Shanghai, China

09/2012-06/2016

Major in Communication Engineering

## RESEARCH INTERESTS

Computer Vision, Deep Learning, Saliency Detection, and Image/Video Object Segmentation

## AWARDS AND PRIZES

- National Scholarship for Doctoral Students, 2020
- President's Scholarship of Shanghai University, 2020
- The Baogang Scholarship, 2020
- The 13th China Graduate Electronic Design Competition (Shanghai Division), 2nd prize, 2018
- The 14th China Graduate Mathematical Modeling Contest, 3rd prize, 2017
- Shanghai Outstanding Graduates, 2016

## **PUBLICATIONS**

Google Scholar profile: https://scholar.google.com/citations?hl=zh-CN&user=YNq7jc8AAAAJ

## **RGB-D Salient Object Detection**

- · Gongyang Li, Zhi Liu, Linwei Ye, Yang Wang, and Haibin Ling, "Cross-modal weighting network for RGB-D salient object detection," European Conference on Computer Vision (ECCV), 2020.
- · Gongyang Li, Zhi Liu, and Haibin Ling, "ICNet: Information conversion network for RGB-D based salient object detection," IEEE Trans. on Image Processing (T-IP), 29:4873-4884, 2020. (IF:10.856)
- Gongyang Li, Zhi Liu, Minyu Chen, Zhen Bai, Weisi Lin, and Haibin Ling, "Hierarchical alternate interaction network for RGB-D salient object detection," IEEE Trans. on Image Processing (T-IP), 30:3528-3542, 2021. (IF:10.856)
- Xiaofei Zhou, Gongyang Li, Chen Gong, Zhi Liu, and Jiyong Zhang, "Attention-guided RGBD saliency detection using appearance information," Image and Vision Computing, 95:103888, 2020. (IF:2.818)
- Zhen Bai, Zhi Liu, Gongyang Li, Linwei Ye, and Yang Wang, "Circular complement network for RGB-D salient object detection," Neurocomputing, 451:95-106, 2021. (IF:5.719)

Salient Object Detection in Optical Remote Sensing Images

- · Gongyang Li, Zhi Liu, Weisi Lin, and Haibin Ling, "Multi-content complementation network for salient object detection in optical remote sensing images," *IEEE Trans. on Geoscience and Remote Sensing (T-GRS)*, 60:1-13, 2022. (IF:5.6)
- Gongyang Li, Zhi Liu, Zhen Bai, Weisi Lin, and Haibin Ling, "Lightweight salient object detection in optical remote sensing images via feature correlation," *IEEE Trans. on Geoscience and Remote Sensing (T-GRS)*, 60:1-12, 2022. (IF:5.6)
- · Gongyang Li, Zhi Liu, Dan Zeng, Weisi Lin, and Haibin Ling, "Adjacent context coordination network for salient object detection in optical remote sensing images," *IEEE Trans. on Cybernetics*, accepted, 2022. (IF:11.448)

## Fixation-based Object Segmentation

- Gongyang Li, Zhi Liu, Ran Shi, Zheng Hu, Weijie Wei, Yong Wu, Mengke Huang, and Haibin Ling, "Personal fixations-based object segmentation with object localization and boundary preservation," *IEEE Trans. on Image Processing (T-IP)*, 30:1461-1475, 2021. (IF:10.856)
- Gongyang Li, Zhi Liu, Ran Shi, and Weijie Wei, "Constrained fixation point based segmentation via deep neural network," *Neurocomputing*, 368:180-187, 2019. (IF:5.719)
- · Ran Shi, **Gongyang Li**, Weijie Wei, and Zhi Liu, "Fixations based personal target objects segmentation," *ACM Multimedia Asia*, 2020.
- · Ran Shi, **Gongyang Li**, Weijie Wei, Xiaofei Zhou, and Zhi Liu, "Personalized image observation behavior learning in fixation based personalized salient object segmentation," *Neurocomputing*, 445:255-266, 2021. (IF:5.719)

## Saliency-related

- Tuo Ding<sup>#</sup>, **Gongyang Li**<sup>#</sup>, Zhi Liu, and Yike Wang, "Cross-scale edge purification network for salient object detection of steel defect images," *Measurement*, accepted, 2022. (# equal contribution) (IF:3.927)
- · Zhen Bai, Zhi Liu, **Gongyang Li**, and Yang Wang, "Adaptive group-wise consistency network for co-saliency detection," *IEEE Trans. on Multimedia (T-MM)*, accepted, 2021. (IF:6.513)
- · Ziqiang Wang, Zhi Liu, **Gongyang Li**, Yang Wang, Tianhong Zhang, Lihua Xu, and Jijun Wang, "Spatio-temporal self-attention network for video saliency prediction," *IEEE Trans. on Multimedia* (*T-MM*), accepted, 2021. (IF:6.513)
- · Mengke Huang, Zhi Liu, **Gongyang Li**, Xiaofei Zhou, and Olivier Le Meur, "FANet: Features adaptation network for 360° omnidirectional salient object detection," *IEEE Signal Processing Letters (SPL)*, 27:1819-1823, 2020. (IF:3.109)
- · Jingru Ren, Zhi Liu, **Gongyang Li**, Xiaofei Zhou, Cong Bai, and Guangling Sun, "Co-saliency detection using collaborative feature extraction and high-to-low feature integration," *IEEE ICME*, 2020.
- · Xiaofei Zhou, Zhi Liu, Chen Gong, **Gongyang Li**, and Mengke Huang, "Video saliency detection using deep convolutional neural networks," *PRCV*, 2018.

## Segmentation-related

- · Gongyang Li, Zhi Liu, and Xiaofei Zhou, "Effective online refinement for video object segmentation," Multimedia Tools and Applications, 78(23):33617-33631, 2019. (IF:2.757)
- Zheng Hu, Zhi Liu, Gongyang Li, Linwei Ye, Lei Zhou, and Yang Wang, "Weakly supervised instance segmentation using multi-stage erasing refinement and saliency-guided proposals ordering," Journal of Visual Communication and Image Representation, 73:102957, 2020. (IF:2.679)

#### Others

· Yong Wu<sup>#</sup>, **Gongyang Li**<sup>#</sup>, Zhi Liu, Mengke Huang, and Yang Wang, "Gaze estimation via modulation-based adaptive network with auxiliary self-learning," submitted to *IEEE Trans. on Circuits and Systems for Video Technology (T-CSVT)*, accepted, 2022. (# equal contribution) (IF: 4.685)

· Qihan Jiao, Zhi Liu, **Gongyang Li**, Linwei Ye, and Yang Wang, "Fine-grained image classification with coarse and fine labels on one-shot learning," *IEEE ICMEW*, 2020.

# TECHNICAL STRENGTHS

 ${\bf Computer\ Languages} \qquad \quad {\bf Matlab,\ Python,\ C/C++,\ Latex}$ 

Frameworks PyTorch, Caffe

# **SERVICES**

Reviewers for IEEE T-PAMI/T-IP/T-VCG/T-NNLS/T-MM/T-CSVT/T-GRS, PR, SPL, Neurocomputing, SPIC, and JCST.