GONGYANG LI

Postdoc, Shanghai University

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https://mathlee.github.io

EDUCATION

• Postdoc, Shanghai University, Shanghai, China

06/2022-Now

- Supervisor: Professor Xinpeng Zhang and Professor Zhi Liu
- Visiting Ph.D. Student, Nanyang Technological University, Singapore

07/2021 - 06/2022

- Major in Computer Vision, Media & Interactive Computing Lab (MICL-CVL)
- Advisor: Professor Weisi Lin (IEEE/IET Fellow)
- Ph.D., Shanghai University, Shanghai, China

09/2016-06/2022

- 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, Saliency Detection, Image/Video Object Segmentation, Semantic 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:11.041)
- · 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:11.041)
- · 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:3.860)

· 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:5.779)

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)*, 60:5614513, 2022. (IF:8.125)
- 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)*, 60:5617712, 2022. (IF:8.125)
- 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*, 53(1):526-538, 2023. (IF:19.118)
- Gongyang Li, Zhi Liu, Xinpeng Zhang, and Weisi Lin, "Lightweight salient object detection in optical remote-sensing images via semantic matching and edge alignment," *IEEE Trans. on Geoscience and Remote Sensing (T-GRS)*, 61:5601111, 2023. (IF:8.125)

RGB-T Semantic Segmentation

• Gongyang Li, Yike Wang, Zhi Liu, Xinpeng Zhang, and Dan Zeng, "RGB-T semantic segmentation with location, activation, and sharpening," *IEEE Trans. on Circuits and Systems for Video Technology* (T-CSVT), accepted, 2022. (IF: 5.859)

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:11.041)
- · Gongyang Li, Zhi Liu, Ran Shi, and Weijie Wei, "Constrained fixation point based segmentation via deep neural network," *Neurocomputing*, 368:180-187, 2019. (IF:5.779)
- · 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:5.779)

Saliency Prediction

· Mengke Huang, **Gongyang Li**[⊠], Zhi Liu, Yong Wu, Chen Gong, Linchao Zhu, and Yi Yang, "Exploring viewport features for semi-supervised saliency prediction in omnidirectional images," *Image and Vision Computing (IVC)*, 129:104590, 2023. (IF:3.860) ([⊠] corresponding author)

Saliency-related

- · Chengjun Han[#], **Gongyang Li**[#], Zhi Liu, and Yike Wang, "Two-stage edge reuse network for salient object detection of strip steel defect images," *IEEE Trans. on Instrumentation and Measurement* (T-IM), 71:5019812, 2022. (# equal contribution) (IF:5.332)
- · Tuo Ding[#], **Gongyang Li**[#], Zhi Liu, and Yike Wang, "Cross-scale edge purification network for salient object detection of steel defect images," *Measurement*, 199:111429, 2022. (# equal contribution) (IF:5.131)
- · 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:8.182)

- · 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:8.182)
- · 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:3.201)
- · 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:2.577)
- · 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:2.887)

Others

- · Yong Wu[#], **Gongyang Li**[#], Zhi Liu, Mengke Huang, and Yang Wang, "Gaze estimation via modulation-based adaptive network with auxiliary self-learning," *IEEE Trans. on Circuits and Systems for Video Technology (T-CSVT)*, 32(8):5510-5520, 2022. (# equal contribution) (IF: 5.859)
- · 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

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

Frameworks PyTorch, Caffe

SERVICES

Reviewers for IEEE T-PAMI/T-IP/T-VCG/T-NNLS/T-MM/T-CSVT/T-GRS/T-ETCI/SPL/GRSL, PR, Neurocomputing, SPIC, JCST, SIVP, IET Image Processing, and European Journal of Remote Sensing.

Area Chair for IEEE MMSP2022.