## References

- [1] J. Zhan and B. Hu, "Salient object contour detection based on boundary similar region," in *Fourth International Conference on Digital Home*, Nov 2012, pp. 335–339.
- [2] T. Xiuli, C. Shuhan, and H. Xuelong, "Salient object detection by combing eye fixation prediction and semantic segmentation," in 13th IEEE International Conference on Electronic Measurement Instruments (ICEMI), Oct 2017, pp. 407–411.
- [3] A. Borji, "What is a salient object? a dataset and a baseline model for salient object detection," *IEEE Transactions on Image Processing*, Feb 2015, v. 24, n. 2, pp. 742–756.
- [4] X. Sun, X. Zhang, W. Zou, and C. Xu, "Focus prior estimation for salient object detection," in *IEEE International Conference on Image Processing* (ICIP), Sep. 2017, pp. 1532–1536.
- [5] K. Huang, C. Zhu, and G. Li, "Robust salient object detection via fusing foreground and background priors," in 25th IEEE International Conference on Image Processing (ICIP), Oct 2018, pp. 2341–2345.
- [6] M. R. Abkenar, H. Sadreazami, and M. O. Ahmad, "Graph-based salient object detection using background and foreground connectivity cues," in *IEEE International Symposium on Circuits and Systems (ISCAS)*, May 2019, pp. 1–5.

- [7] F. Nouri, K. Kazemi, and H. Danyali, "Salient object detection via global contrast graph," in Signal Processing and Intelligent Systems Conference (SPIS), Dec 2015, pp. 159–163.
- [8] X. Wang, Y. Zhang, X. Xie, and Y. Li, "Salient object detection via double sparse representations under visual attention guidance," in *IEEE International Geoscience and Remote Sensing Symposium*, July 2018, pp. 3631–3634.
- [9] C. Zhu, G. Li, W. Wang, and R. Wang, "Salient object detection with complex scene based on cognitive neuroscience," in *IEEE Third International Conference on Multimedia Big Data (BigMM)*, April 2017, pp. 33–37.
- [10] H. Wang and H. Lv, "Salient object detection with fixation priori," in *International Conference on Machine Learning and Cybernetics (ICMLC)*, v. 1, July 2016, pp. 285–289.
- [11] S. Du and S. Chen, "Salient object detection via random forest," *IEEE Signal Processing Letters*, Jan 2014, v. 21, n. 1, pp. 51–54.
- [12] H. Eun, J. Kim, and C. Kim, "Salient object detection using HOS based  $L_0$  smoothing and shape-aware region merging," in *Visual Communications and Image Processing (VCIP)*, Dec 2015, pp. 1–4.
- [13] R. N. Kachore, "Detections of salient region by using fast pixelwise image saliency aggregation (F-PISA)," in *International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC)*, Feb 2017, pp. 629–633.
- [14] K. Yang, H. Li, C. Li, and Y. Li, "A unified framework for salient structure detection by contour-guided visual search," *IEEE Transactions on Image Processing*, Aug 2016, v. 25, n. 8, pp. 3475–3488.
- [15] Q. Zhang, D. Luo, W. Li, Y. Shi, and J. Lin, "Two-stage absorbing markov chain for salient object detection," in *IEEE International Conference on Image* Processing (ICIP), Sep 2017, pp. 895–899.

- [16] Q. Hou, M. Cheng, X. Hu, A. Borji, Z. Tu, and P. H. S. Torr, "Deeply supervised salient object detection with short connections," *IEEE Transactions on Pattern Analysis and Machine Intelligence*, April 2019, v. 41, n. 4, pp. 815–828.
- [17] S. Abinash, "Two novel graph theory based algorithms for salient object detection," in 4th International Conference on Computing Communication and Automation (ICCCA), Dec 2018, pp. 1–6.
- [18] J. Zhang, K. A. Ehinger, J. Ding, and J. Yang, "A prior-based graph for salient object detection," in *IEEE International Conference on Image Pro*cessing (ICIP), Oct 2014, pp. 1175–1178.
- [19] K. Tang, O. C. Au, L. Fang, Z. Yu, and Y. Guo, "Multi-scale analysis of color and texture for salient object detection," in 18th IEEE International Conference on Image Processing, Sep. 2011, pp. 2401–2404.
- [20] Y. Seo, D. Lee, and C. D. Yoo, "Salient object detection using bipartite dictionary," in *IEEE International Conference on Image Processing (ICIP)*, Oct 2014, pp. 1145–1149.
- [21] Y. Zhang, L. Guo, and G. Cheng, "Improved salient objects detection based on salient points," in 35th Chinese Control Conference (CCC), July 2016, pp. 4194–4197.
- [22] Y. Zhang, F. Zhang, and L. Guo, "Salient object detection based on background model," in 37th Chinese Control Conference (CCC), July 2018, pp. 9374–9378.
- [23] X. Hu, W. Yang, X. Wang, and Q. Liao, "Salient object detection via spectral clustering," in *IEEE Information Technology*, Networking, Electronic and Automation Control Conference, May 2016, pp. 165–169.

- [24] J. Kim, H. Lee, and J. Kim, "A novel method for salient object detection via compactness measurement," in *IEEE International Conference on Image Processing*, Sep. 2013, pp. 3426–3430.
- [25] C. T. Vu and D. M. Chandler, "An algorithm for detecting multiple salient objects in images via adaptive feature selection," in 19th IEEE International Conference on Image Processing, Sep. 2012, pp. 657–660.
- [26] A. Kapoor, K. K. Biswas, and M. Hanmandlu, "Information set based approach for salient object detection," in Fifth National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG), Dec 2015, pp. 1–4.
- [27] Y. Zeng and C. Tsai, "Detection of salient object using pixel blurriness," in Proceedings of The Asia Pacific Signal and Information Processing Association Annual Summit and Conference, Dec 2012, pp. 1–4.
- [28] X. Wang and Z. Liu, "Salient object detection by optimizing robust background detection," in *IEEE 18th International Conference on Communication Technology (ICCT)*, Oct 2018, pp. 1164–1168.
- [29] Y. Seo and C. D. Yoo, "Salient object detection based on sparse representation with image-specific prior," in *The 18th IEEE International Symposium on Consumer Electronics*, June 2014, pp. 1–2.
- [30] Y. Kong, J. Zhang, H. Lu, and X. Liu, "Exemplar-aided salient object detection via joint latent space embedding," *IEEE Transactions on Image Processing*, Oct 2018, v. 27, n. 10, pp. 5167–5177.
- [31] B. Wang, T. Zhang, and X. Wang, "Salient object detection based on objectness," in *IEEE International Conference on Signal Processing, Communications and Computing (ICSPCC)*, Sep. 2015, pp. 1–5.

- [32] C. Wang and B. Yang, "Saliency-guided object proposal for refined salient region detection," in *Visual Communications and Image Processing (VCIP)*, Nov 2016, pp. 1–4.
- [33] Y. Zhou, A. Mao, S. Huo, J. Lei, and S. Kung, "Salient object detection via fuzzy theory and object-level enhancement," *IEEE Transactions on Multime*dia, Jan 2019, v. 21, n. 1, pp. 74–85.
- [34] T. Li and D. P. K. Lun, "Salient object detection using array images," in Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC), Dec 2017, pp. 300–303.
- [35] R. S. Srivatsa and R. V. Babu, "Salient object detection via objectness measure," in *IEEE International Conference on Image Processing (ICIP)*, Sep. 2015, pp. 4481–4485.
- [36] S. Huo, Y. Zhou, and S. Kung, "Salient object detection via a linear feed-back control system," in *IEEE International Conference on Image Processing* (ICIP), Sep. 2017, pp. 4257–4261.
- [37] C. Wang, Y. Fan, and L. Xiong, "Robust ranking on manifold for salient object detection," in 9th International Symposium on Computational Intelligence and Design (ISCID), v. 1, Dec 2016, pp. 205–210.
- [38] X. Li, Y. Li, C. Shen, A. Dick, and A. V. D. Hengel, "Contextual hypergraph modeling for salient object detection," in *IEEE International Conference on Computer Vision*, Dec 2013, pp. 3328–3335.
- [39] X. Wu, X. Ma, J. Zhang, and Z. Jin, "Salient object detection via reliable boundary seeds and saliency refinement," *IET Computer Vision*, 2019, v. 13, n. 3, pp. 302–311.
- [40] Q. Liu, X. Hong, B. Zou, J. Chen, Z. Chen, and G. Zhao, "Hierarchical contour closure-based holistic salient object detection," *IEEE Transactions on Image Processing*, Sep. 2017, v. 26, n. 9, pp. 4537–4552.

- [41] X. Yan, Y. Wang, Q. Song, and K. Dai, "Salient object detection by multi-level features learning determined sparse reconstruction," in *IEEE International Conference on Image Processing (ICIP)*, Sep. 2016, pp. 2762–2766.
- [42] X. Zhang, X. Sun, and X. Zhang, "Salient object detection via nonconvex structured matrix decomposition," in 13th International Conference on Computational Intelligence and Security (CIS), Dec 2017, pp. 120–124.
- [43] H. Peng, B. Li, H. Ling, W. Hu, W. Xiong, and S. J. Maybank, "Salient object detection via structured matrix decomposition," *IEEE Transactions on Pattern Analysis and Machine Intelligence*, April 2017, v. 39, n. 4, pp. 818–832.
- [44] X. Wang, H. Ma, and X. Chen, "Geodesic weighted bayesian model for salient object detection," in *IEEE International Conference on Image Processing* (ICIP), Sep. 2015, pp. 397–401.
- [45] D. Xiang, B. Zhong, and K. Ma, "A location-aware scale-space method for salient object detection," in *IEEE International Conference on Image Pro*cessing (ICIP), Sep. 2015, pp. 4195–4199.
- [46] X. Xu, N. Mu, H. Zhang, and X. Fu, "Salient object detection from distinctive features in low contrast images," in *IEEE International Conference on Image* Processing (ICIP), Sep. 2015, pp. 3126–3130.
- [47] T. Hendrawati, I. N. Sukajaya, and K. Y. E. Aryanto, "Automatic image annotation using minimum barrier salient object detection and random forest," in *International Seminar on Intelligent Technology and Its Applications (ISI-TIA)*, Aug 2018, pp. 305–310.
- [48] M. Nikhila and S. Rawat, "Recognition of salient object," in *IEEE International Conference on Advances in Electronics, Communication and Computer Technology (ICAECCT)*, Dec 2016, pp. 283–286.

- [49] X. Xiao and Y. Zhou, "Focusness guided salient object detection," in IEEE International Conference on Systems, Man, and Cybernetics (SMC), Oct 2017, pp. 3462–3466.
- [50] C. Yang, L. Zhang, and H. Lu, "Graph-regularized saliency detection with convex-hull-based center prior," *IEEE Signal Processing Letters*, July 2013, v. 20, n. 7, pp. 637–640.
- [51] B. Fu, Y. Jin, F. Wang, and X. Hu, "Prior fusion based salient object detection," in 11th International Computer Conference on Wavelet Actiev Media Technology and Information Processing(ICCWAMTIP), Dec 2014, pp. 106–109.
- [52] M. A. Islam, M. Kalash, and N. D. B. Bruce, "Revisiting salient object detection: Simultaneous detection, ranking, and subitizing of multiple salient objects," in *IEEE/CVF Conference on Computer Vision and Pattern Recognition*, June 2018, pp. 7142–7150.
- [53] Bo Xiao and Bin Wang, "Efficient hd video and image salient object detection with hierarchical boolean map approach," in 2nd International Conference on Image, Vision and Computing (ICIVC), June 2017, pp. 1–7.
- [54] A. Krizhevsky, I. Sutskever, and G. E. Hinton, "Imagenet classification with deep convolutional neural networks," in NIPS, 2012.
- [55] R. B. Girshick, "Fast R-CNN," CoRR, 2015, v. abs/1504.08083. [Online]. Available: http://arxiv.org/abs/1504.08083
- [56] K. He, G. Gkioxari, P. Dollár, and R. B. Girshick, "Mask R-CNN," CoRR, 2017, v. abs/1703.06870. [Online]. Available: http://arxiv.org/abs/1703.06870
- [57] J. Redmon, S. Divvala, R. Girshick, and A. Farhadi, "You only look once: Unified, real-time object detection," in *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, June 2016, pp. 779–788.

- [58] K. He, X. Zhang, S. Ren, and J. Sun, "Deep residual learning for image recognition," CoRR, 2015, v. abs/1512.03385. [Online]. Available: http://arxiv.org/abs/1512.03385
- [59] C. Szegedy, Wei Liu, Yangqing Jia, P. Sermanet, S. Reed, D. Anguelov, D. Erhan, V. Vanhoucke, and A. Rabinovich, "Going deeper with convolutions," in *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, June 2015, pp. 1–9.
- [60] K. Simonyan and A. Zisserman, "Very deep convolutional networks for large-scale image recognition," arXiv 1409.1556, 09 2014.
- [61] I. Goodfellow, J. Pouget-Abadie, M. Mirza, B. Xu, D. Warde-Farley, S. Ozair, A. Courville, and Y. Bengio, "Generative adversarial nets," in *Advances in neural information processing systems*, 2014, pp. 2672–2680.
- [62] S. Xie and Z. Tu, "Holistically-nested edge detection," in 2015 IEEE International Conference on Computer Vision (ICCV), Dec 2015, pp. 1395–1403.
- [63] X. Wang, H. Ma, and X. Chen, "Salient object detection via fast r-cnn and low-level cues," in *IEEE International Conference on Image Processing (ICIP)*, Sep. 2016, pp. 1042–1046.
- [64] Y. Liu, X. Wang, S. Qi, J. Guan, F. Jia, and L. Yao, "Pixel meets region: A pratical framework for salient object detection," in *IEEE International Conference on Multimedia and Expo (ICME)*, July 2018, pp. 1–6.
- [65] P. Krähenbühl and V. Koltun, "Efficient inference in fully connected crfs with gaussian edge potentials," CoRR, 2012, v. abs/1210.5644. [Online]. Available: http://arxiv.org/abs/1210.5644
- [66] Y. Wang, X. Zhao, X. Hu, Y. Li, and K. Huang, "Focal boundary guided salient object detection," *IEEE Transactions on Image Processing*, June 2019, v. 28, n. 6, pp. 2813–2824.