

Progressively Guided Alternate Refinement Network for RGB-D Salient Object Detection

Supplementary Material

Paper ID 618

We further conduct experiments on RGB-T datasets to demonstrate the effectiveness of the proposed network. We randomly select 500 samples from the VT821 [1] and 500 samples from the VT1000 [2] for training. The rest images are for testing. The quantitative results are shown in Table 1. We also show some visual examples in Fig. 1. From these results, the proposed network can be directly applied for other cross-modal SOD task. In the future, we will explore other modality to boost RGB SOD.

Table 1. Quantitative comparison with/without thermal stream. R and T denote RGB stream and thermal stream respectively.

	VT821 [1]		VT1000 [2]	
	R	R+T	R	R+T
$E_\gamma \uparrow$	0.931	0.938	0.929	0.934
$S_\lambda \uparrow$	0.914	0.927	0.920	0.924
$F_\beta \uparrow$	0.855	0.869	0.877	0.880
$M \downarrow$	0.027	0.022	0.027	0.026

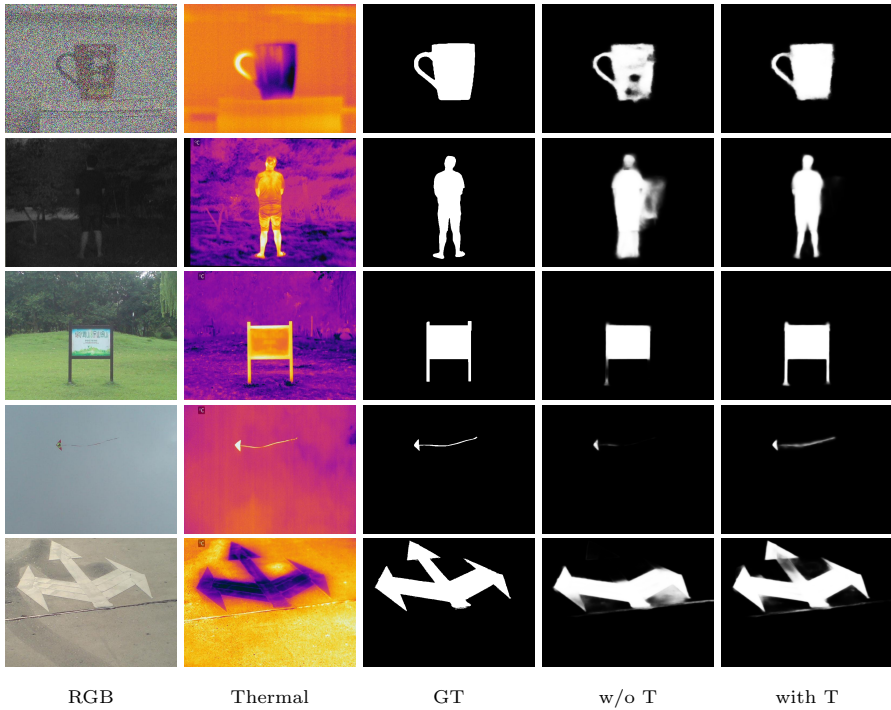


Fig. 1. Visual comparisons with/without the thermal stream.

References

1. Tang, J., Fan, D., Wang, X., Tu, Z., Li, C.: Rgbt salient object detection: Benchmark and a novel cooperative ranking approach. *IEEE Transactions on Circuits and Systems for Video Technology* (2019) 1
2. Tu, Z., Xia, T., Li, C., Wang, X., Ma, Y., Tang, J.: Rgb-t image saliency detection via collaborative graph learning. *IEEE Transactions on Multimedia* **22**(1), 160–173 (2019) 1