

Table 1: Evaluating SegRefiner with the commonly used metrics for DIS. Coarse masks are obtained from U-Net and ISNet, representing the relatively weaker and stronger baselines for DIS, respectively. w/o and w/ indicates the original and refined results. Metrics improvements are highlighted with red, the magnitude of “e-3” is omitted.

Coarse Mask	Metrics	DIS-VD	DIS-TE1	DIS-TE2	DIS-TE3	DIS-TE4
U-Net	$maxF_\beta \uparrow$	w/o 0.692	0.625	0.703	0.748	0.759
	w/	0.706 +14	0.629 +4	0.719 +14	0.764 +16	0.786 +27
	$M \downarrow$	w/o 0.113	0.106	0.107	0.098	0.102
	w/	0.096 -17	0.095 -11	0.091 -16	0.080 -18	0.078 -24
	$S_a \uparrow$	w/o 0.745	0.716	0.755	0.780	0.784
	w/	0.749 +4	0.718 +2	0.760 +5	0.786 +6	0.795 +11
ISNet	$E_\phi^m \uparrow$	w/o 0.785	0.750	0.796	0.827	0.821
	w/	0.828 +43	0.778 +28	0.837 +41	0.873 +46	0.881 +60
	$HCE_\gamma \downarrow$	w/o 1337	233	474	883	3218
	w/	994 -343	175 -58	354 -120	652 -231	2368 -850
	$maxF_\beta \uparrow$	w/o 0.791	0.740	0.799	0.830	0.827
	w/	0.797 +6	0.740 +0	0.804 +5	0.835 +5	0.839 +12
	$M \downarrow$	w/o 0.074	0.074	0.070	0.064	0.072
	w/	0.067 -7	0.071 -3	0.065 -5	0.059 -5	0.061 -11
	$S_a \uparrow$	w/o 0.813	0.787	0.823	0.836	0.830
	w/	0.821 +8	0.797 +10	0.830 +7	0.843 +7	0.842 +12
	$E_\phi^m \uparrow$	w/o 0.856	0.820	0.858	0.883	0.870
	w/	0.877 +21	0.835 +15	0.873 +15	0.901 +18	0.900 +30
	$HCE_\gamma \downarrow$	w/o 1116	149	340	687	2888
	w/	910 -206	142 -7	320 -20	599 -88	2305 -583

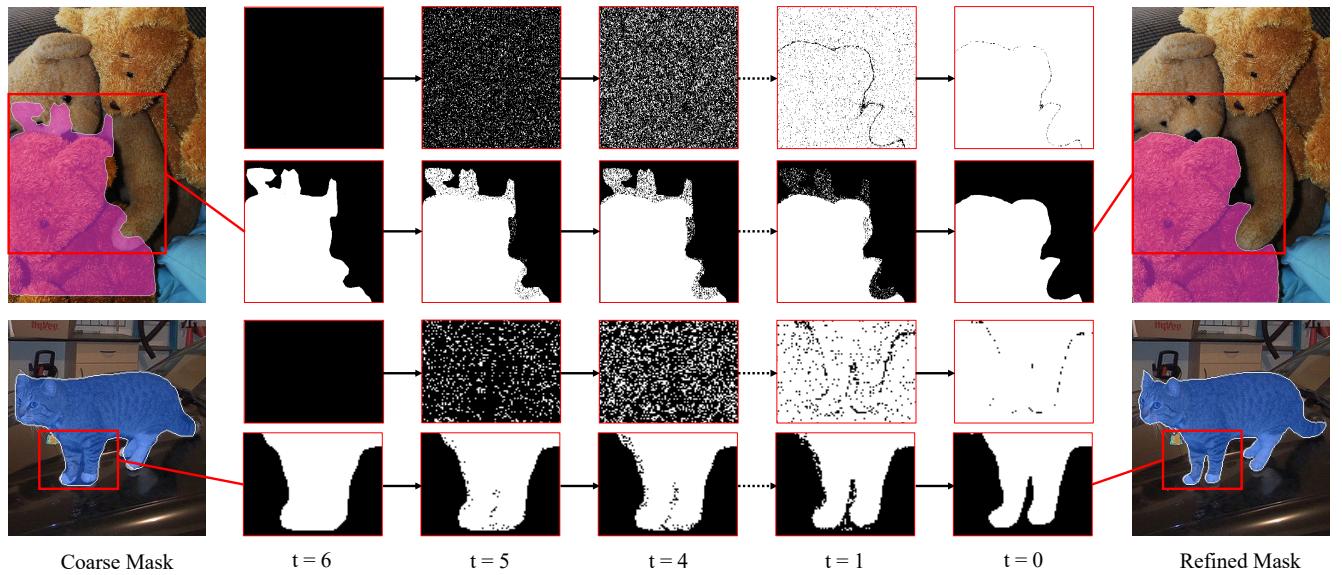
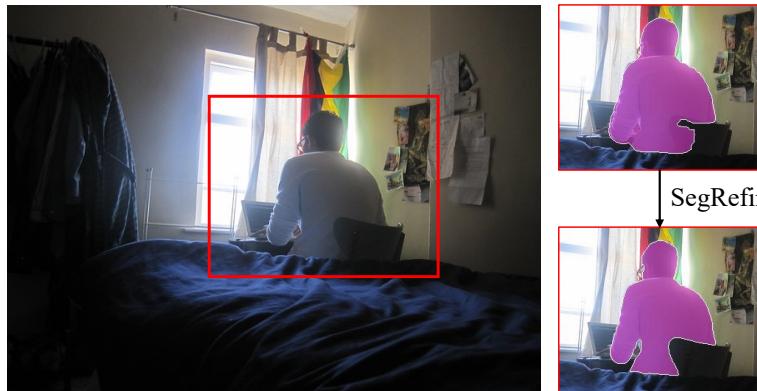


Figure 1: Visualization of how each step of SegRefiner works during inference. The first row of each sample denotes the state and the second row denotes the corresponding mask.



IoU-Threshold	0.5	0.6	0.7	0.8	0.9
Mask IoU: 0.73	TP	TP	TP	FP	FP
Boundary IoU: 0.48	FP	FP	FP	FP	FP
SegRefiner					
IoU-Threshold	0.5	0.6	0.7	0.8	0.9
Mask IoU: 0.85	TP	TP	TP	TP	FP
Boundary IoU: 0.81	TP	TP	TP	TP	FP

Figure 2: An example to illustrate why Boundary AP improves more. "TP" and "FP" correspond to True Positive and False Positive, respectively. The items that undergo enhancements after refinement are highlighted with red.