Table 1: Performance of Token Reduction methods with DeiT-S backbone. Model performance is measured across varying keep rates, r, denoted in percentage of tokens kept at each reduction stage. Scores exceeding the DeiT baseline are noted in **bold**, measured in Top-1 accuracy for ImageNet & NABirds and mean Average Precision for COCO & NUS-WIDE. The three best performing methods per keep rate are denoted in descending order with red, orange, and yellow, respectively. Similarly, the three worst performing methods are denoted in descending order with light blue, blue, and dark blue. Results with the DeiT-B and DeiT-T backbones are available in the supplementary material.

	<u>ImageNet</u> 79.85				NABirds 80.57				COCO					NUS-WIDE				
DeiT-S									78.11					63.23				
r (%)	25	50	70	90	25	50	70	90	25	50	70	90		25	50	70	90	
$\overline{\ell_1}$	70.05	74.47	77.25	79.17	62.90	70.52	77.10	80.08	61.28	69.49	74.31	77.09		54.44	59.60	61.98	62.91	
ℓ_2	70.54	74.86	77.41	79.27	64.28	72.09	77.53	80.11	62.23	70.30	74.66	77.19		55.31	60.22	62.07	62.71	
ℓ_{∞}	70.58	74.03	77.48	79.23	63.36	70.19	77.23	79.96	61.50	69.11	74.73	77.27		55.10	59.34	62.11	62.77	
Top-K	72.91	77.82	79.22	79.87	76.28	80.38	80.70	80.60	70.14	75.84	77.50	78.09		59.32	61.98	62.69	63.26	
EViT	74.17	78.08	79.30	79.87	76.74	80.28	80.73	80.64	71.28	75.78	77.50	78.07		59.69	61.89	62.67	63.25	
DynamicViT	60.32	77.84	79.17	79.79	70.60	80.62	80.77	80.84	39.18	69.02	75.43	77.69		39.20	57.83	61.96	63.16	
ATS	72.95	77.86	79.09	79.63	73.46	78.89	80.36	80.55	70.13	75.66	77.23	77.83		60.20	62.35	62.93	63.18	
ToMe	-	78.29	79.63	79.92	-	74.99	80.05	80.68	-	74.99	77.36	77.88		-	61.51	62.50	62.89	
K-Medoids	68.94	76.44	78.74	79.73	65.28	76.95	79.75	80.46	66.26	74.15	76.76	77.94		57.78	61.48	62.47	63.12	
DPC-KNN	75.01	77.95	78.85	79.54	68.77	74.14	76.70	78.88	72.15	75.70	77.06	77.74		60.78	62.11	62.67	62.93	
SiT	74.65	77.16	77.52	77.71	62.82	62.02	60.72	58.50	57.65	57.33	57.11	57.13		57.95	58.84	59.29	59.59	
PatchMerger	69.44	74.17	75.80	76.75	47.26	61.34	65.45	68.24	62.24	68.09	70.75	72.12		55.82	59.27	60.46	61.20	
Sinkhorn	64.26	64.07	64.02	64.09	48.89	50.19	51.46	51.22	56.93	56.68	56.85	56.65		50.59	50.67	50.63	50.21	