

# Supplemental Material for *Open-set Recognition with Supervised Contrastive Learning*: Experimental results of feature selection

Due to the space limitation of the article, we place the results of the feature selection experiments in the supplementary material. As shown in Fig. 1,  $z_1$ ,  $z_2$ ,  $z_3$  are the intermediate outputs from the encoder,  $z$  is the final output of the encoder,  $co$  is the contrastive feature and  $av$  is the activation vector.

As Table 1 shows, the results are better with outputs from higher layers, e.g.,  $z_3$  can differentiate unknowns than  $z_1$ .  $z$ ,  $av$  and  $co$  work similarly well, while  $av$  and  $co$  produce better results when trained with SVHN and TinyImagenet.

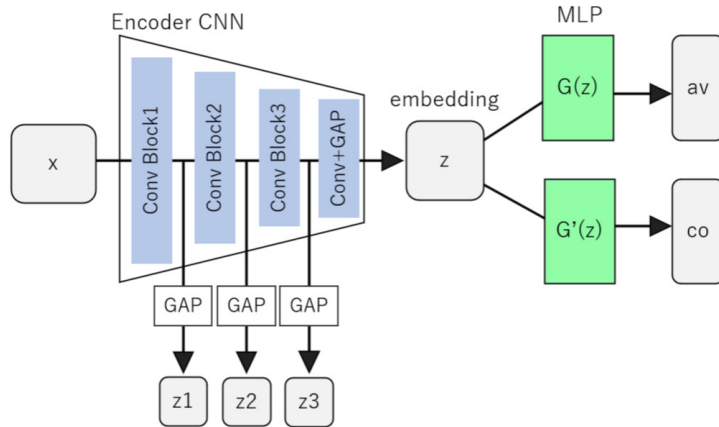


Figure 1: Candidate features that can be utilized for EVT with the proposed network.

Table 1: Comparison of AUC (area under curve) with different features. Higher is better.

Feature	CIFAR10	SVHN	TinyImagenet
$z_1$	52.83	57.69	54.38
$z_2$	64.86	62.94	63.26
$z_3$	80.39	68.28	68.34
$z$	83.92	93.77	74.78
$co$	83.38	95.53	76.20
$av$	83.97	95.12	76.57