Supplementary Material for Symbiotic Adversarial Learning for Attribute-based Person Search

Yu-Tong Cao*, Jingya Wang*, and Dacheng Tao

UBTECH Sydney AI Centre, School of Computer Science, Faculty of Engineering,
The University of Sydney, Darlington, NSW 2008, Australia
{ycao5602@un., jingya.wang@, dacheng.tao@sydney.edu.au}

Fig. 1. Ranked retrieval results. The query attributes are shown above the retrieved images. The green/red border represents correct/wrong selections respectively. The attributes in bold correspond to false matches.

Fig. 1 visualizes the ranked results from Embed, Embed+adv, Embed+symb-adv and SAL to qualitatively illustrate the performance of the three models. Although the models are able to pick out some correct images from candidates in the top 10 ranks, SAL selected more with higher ranks. Checking the wrong attributes of the false ranks, we can see that SAL was better able to discern fine-grained attributes, such as different kinds of bags. Moreover, SAL picked correct images of diverse appearances, which may indicate it has some ability to overcome intra-class variation problems.