Supplementary Material of Joint Learning of Single-image and Cross-image Representations for Person Re-identification

Faqiang Wang^{1,2}, Wangmeng Zuo¹, Liang Lin³, David Zhang^{1,2}, Lei Zhang² ¹School of Computer Science and Technology, Harbin Institute of Technology, Harbin, China ²Dept. of Computing, The Hong Kong Polytechnic University, Hong Kong, China ³Sun Yat-sen University, Guangzhou, China

tshfqw@163.com, cswmzuo@gmail.com, linliang@ieee.org, {csdzhang, cslzhang}@comp.polyu.edu.hk



Figure 1. The CMC curves of the proposed pairwise and triplet comparison models on the CUHK03 dataset (best viewed in color)

1. The CMC Curves of the Pairwise and Triplet Comparison Models

We report the CMC curves of different settings of the proposed pairwise and triplet comparison models on the CUHK03 dataset in Fig. 1. For each of the pairwise and triplet comparison models, we report the CMC curves of SIR and CIR, respectively. The rank-1 matching accuracies are reported in Table 1 of the main manuscript. From the results, we can see that the SIR and CIR based matching obtain comparable results, while their combination achieves a higher accuracy than either of them. The matching accuracy of triplet comparison model is higher than pairwise comparison model, and their combination also outperforms either of them.

2. The Convergence Curves of the Pairwise and Triplet Comparison Models

The convergence curves of the pairwise and triplet comparison models on the CUHK03 dataset are illustrated in



Figure 2. The convergence curves of the pairwise comparison model on the CUHK03 dataset (best viewed in color)



Figure 3. The convergence curves of the triplet comparison model on the CUHK03 dataset (best viewed in color)

Fig. 2 and Fig. 3, respectively. One can see that the proposed models converge in 100,000 to 150,000 iterations.