

Supplementary Materials

More details on the Dataset 1 is given in in Sec. 1. The list of target IDs observed in each camera FoV is provided along with the overlap in observations across pairs of cameras. As there are 4 cameras in Dataset 1, there would be a total of 6 camera pairs. In Sec. 2, we provide CMC curves for all six camera pairs (including the 4 camera pairs shown in Fig. 6 of the main manuscript) and for each of the four feature computation methods, viz., PCA, Fisherfaces, MSDA and WSSDA.

1 Target IDs in Different Camera FoVs for Dataset 1

72 targets (IDs 1 to 72) are observed in 4 camera Field-of-Views (on 4 wearable devices) in Dataset 1. However, not all the targets are observed in every camera. The target IDs visible in 4 cameras are as follows.

1. Camera 1's FoV: Target IDs 1 to 52.
2. Camera 2's FoV: Target IDs 1 to 40.
3. Camera 3's FoV: Target IDs 1 to 30 and 60 to 72.
4. Camera 4's FoV: Target IDs 11 to 40 and 53 to 72.

Thus camera 1 has a total of 52 observations, whereas cam 2 has 40, cam 3 43 and cam 4 has 50 observations. The targets with IDs 11 to 30 are observed in all the cameras. The number of overlapping targets across pairs of camera FoVs are -

1. Camera pair 1-2: 40
2. Camera pair 1-3: 30
3. Camera pair 1-4: 30
4. Camera pair 2-3: 30
5. Camera pair 2-4: 30
6. Camera pair 3-4: 33

2 Cumulative Matching Characteristics (CMC) Curves (Dataset 1)

Four pairwise feature computation methods, viz., PCA, FisherFaces, MSDA and WSSDA are used for computing pairwise similarity scores, and after that NCR is applied on top of each of them to establish network consistency. As the Dataset 1 consists of videos captured via cameras on 4 Google Glasses, we have a total 6 camera pairs. In this section, we present all the $6 \times 4 = 24$ CMC curves to compare baseline methods (pairwise re-id) before and after application of batch NCR.

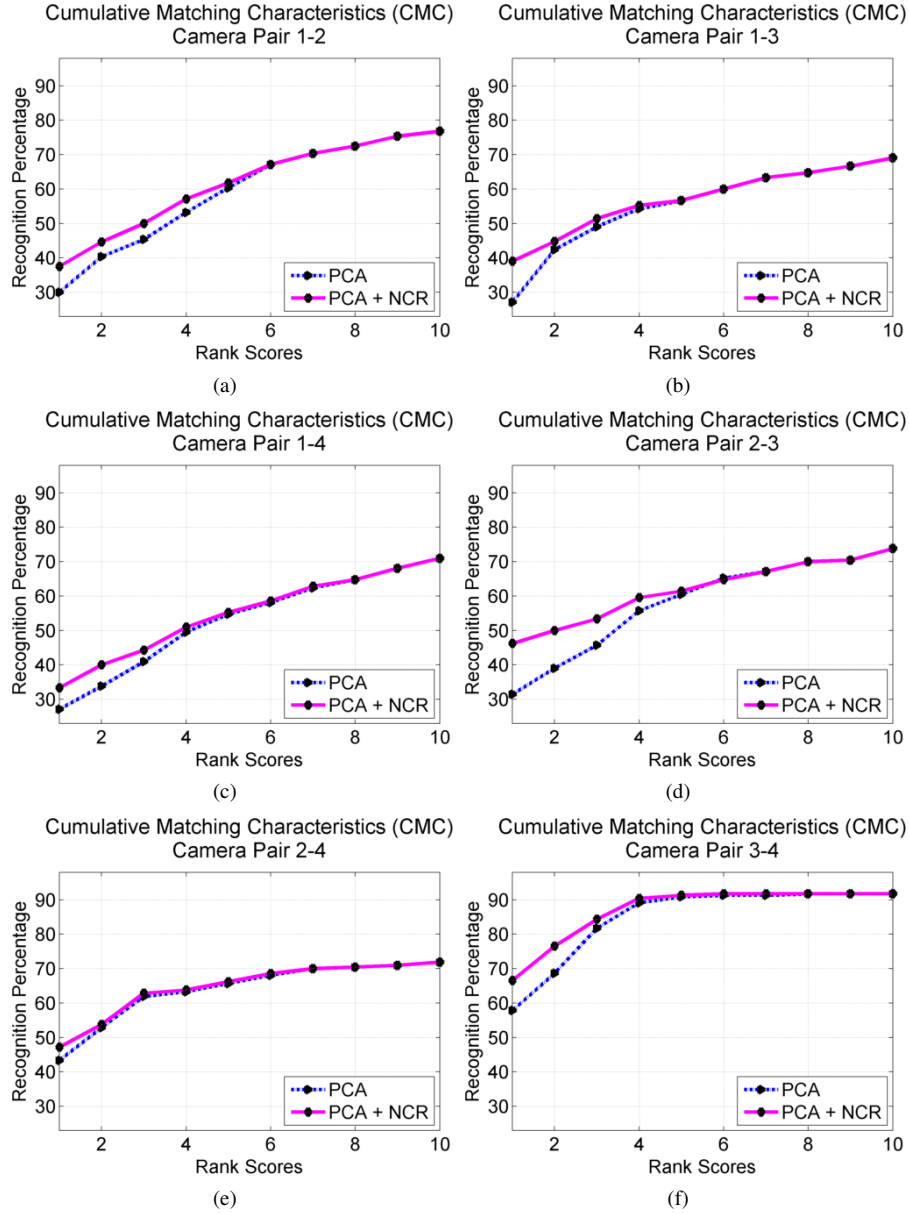


Figure 1: CMC curves comparing pairwise re-identification results obtained by PCA only and by NCR applied on PCA. PCA+NCR shows improvements over the baseline (PCA) across all 6 camera pairs.

Fig. 1, Fig. 2, Fig. 3 and Fig. 4 show the CMC curves obtained before and after application of NCR for PCA, FisherFaces, MSDA and WSSDA methods respectively.

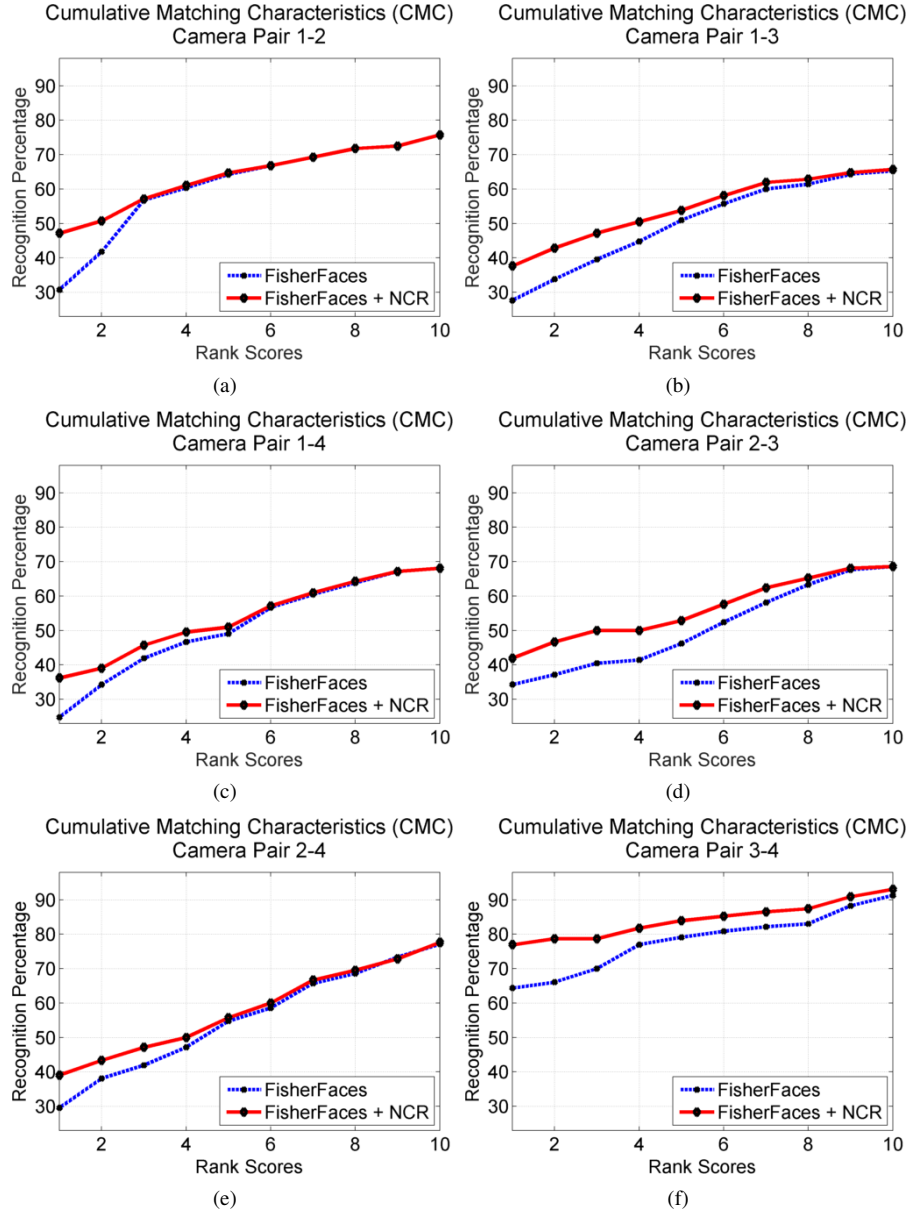


Figure 2: CMC curves comparing pairwise re-identification results obtained by FisherFaces only and by NCR applied on FisherFaces. FisherFaces+NCR shows improvements over the baseline (FisherFaces) across all 6 camera pairs.

For all the four figures, the sub-figures (a), (b), (c), (d), (e) and (f) present CMCs for camera pairs 1-2, 1-3, 1-4, 2-3, 2-4 and 3-4 respectively.

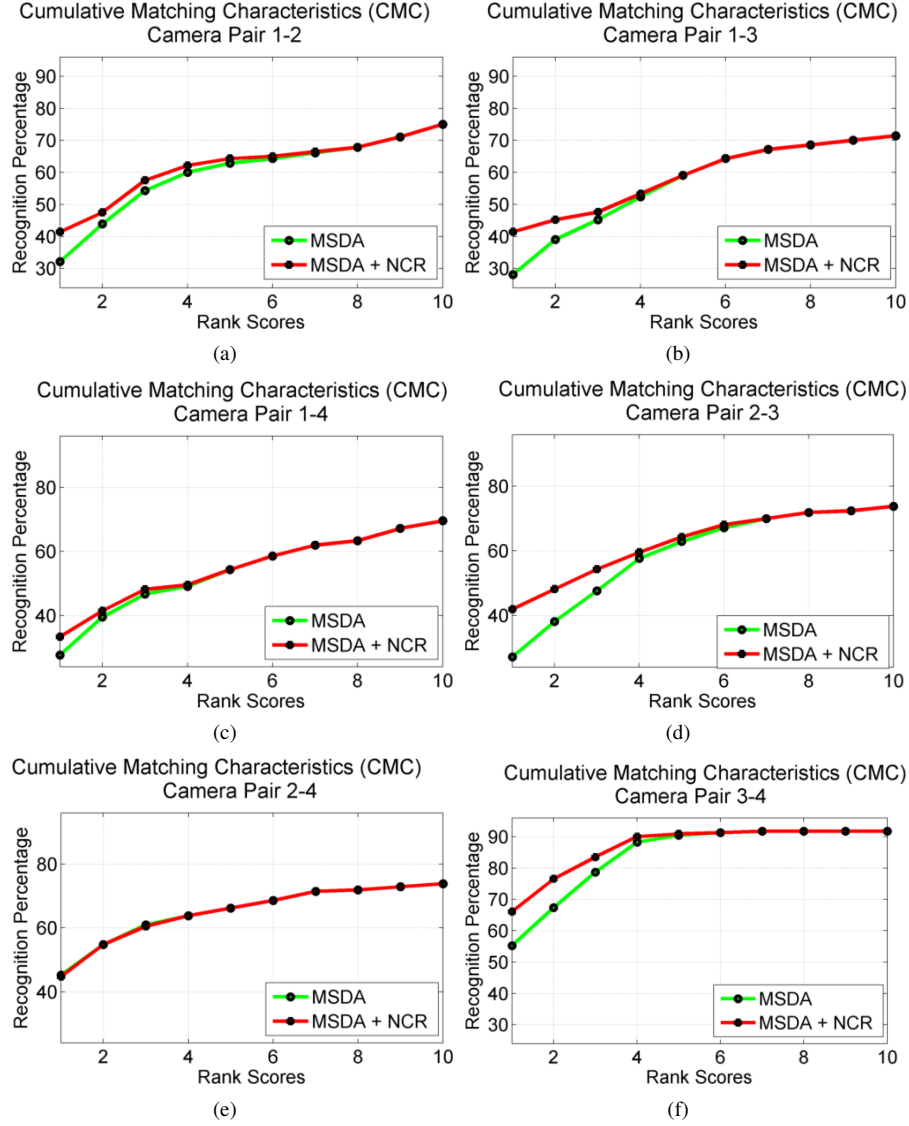


Figure 3: CMC curves comparing pairwise re-identification results obtained by the MSDA method only and by NCR applied on MSDA. MSDA+NCR shows improvements over the baseline (MSDA) across 5 out of 6 camera pairs. In camera pair 2-4, the performances are almost identical.

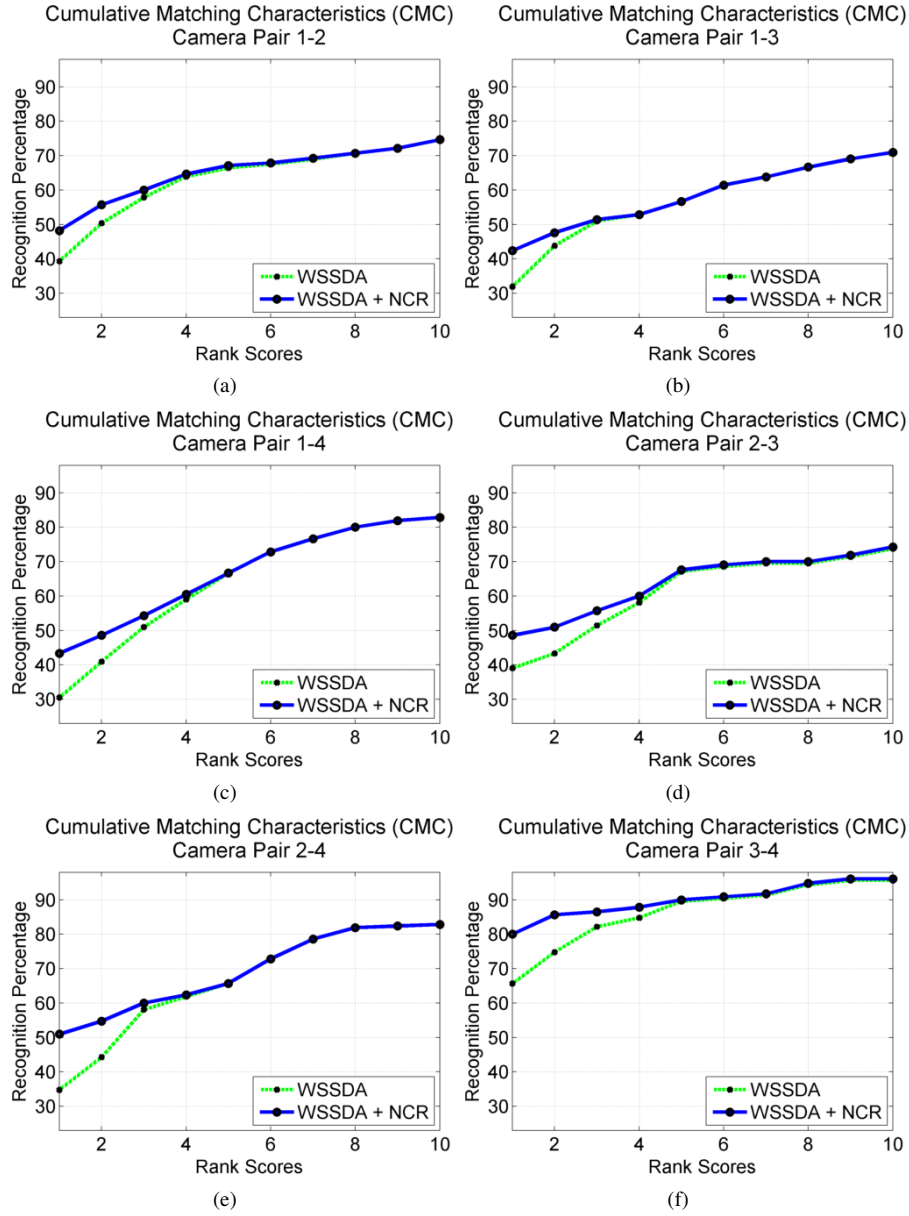


Figure 4: CMC curves comparing pairwise re-identification results obtained by the WSSDA method only and by NCR applied on WSSDA. WSSDA+NCR shows improvements over the baseline (WSSDA) across all 6 camera pairs.