



Fig. 2: Overview of our SymmFCNet. **Red**, **green** and **blue** lines in (a) represent the three types of pixel-wise correspondence between the input and the flip image. **Red**: missing pixels (input) to non-occluded pixels (flip); **Green**: missing pixels (input) to missing pixels (flip); **Blue**: remaining pixels (input) to remaining pixels (flip). In Stage I, the missing pixels in one-half face (**red lines**) are filled by reweighting the illumination of their symmetrical pixels in the other half-face. In Stage II, the missing pixels in both-half faces (**green lines** in (a)) are filled by the generative reconstruction subnet with the incorporation of perceptual symmetry loss for symmetry-consistent completion.