

Enhancing pose estimation through efficient patch synthesis supplementary material

These figures show a representative sample of the construction view, together with the query view, in order to illustrate the strong viewpoint changes. The superposed reprojection of the hand-picked rectangle in the query view with 100 pose computation are also shown, without and with synthetic patches. The position and orientation of the corresponding cameras are also illustrated.

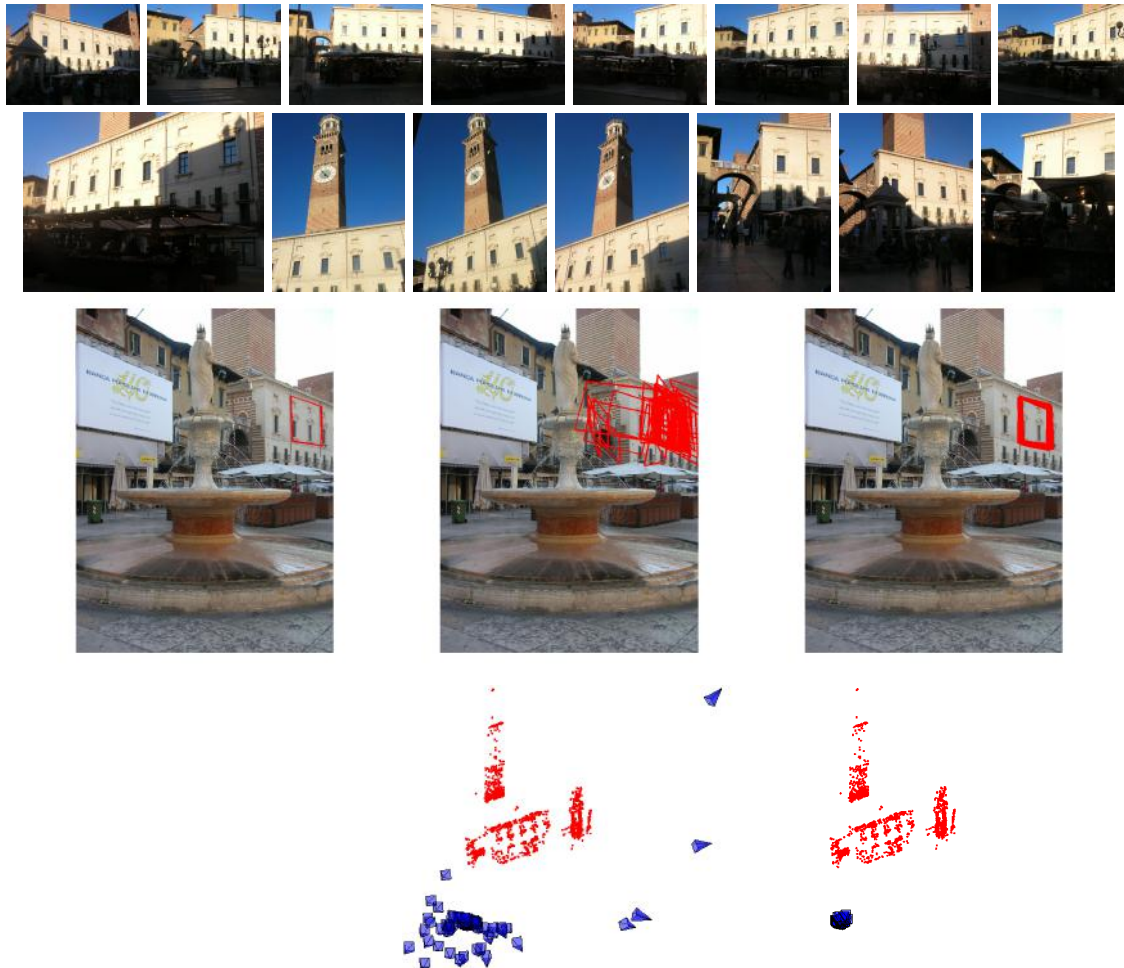


FIGURE 1 – tower dataset. The first and second row displays samples of the construction views. The third row displays the query view with manually extracted scene edges (left), the reprojection of these edges using 100 pose computed from the SfM model (middle) and from the model with synthetic patches (right). The fourth row shows the 100 computed poses from the SfM model (left) and from the enriched model (right).

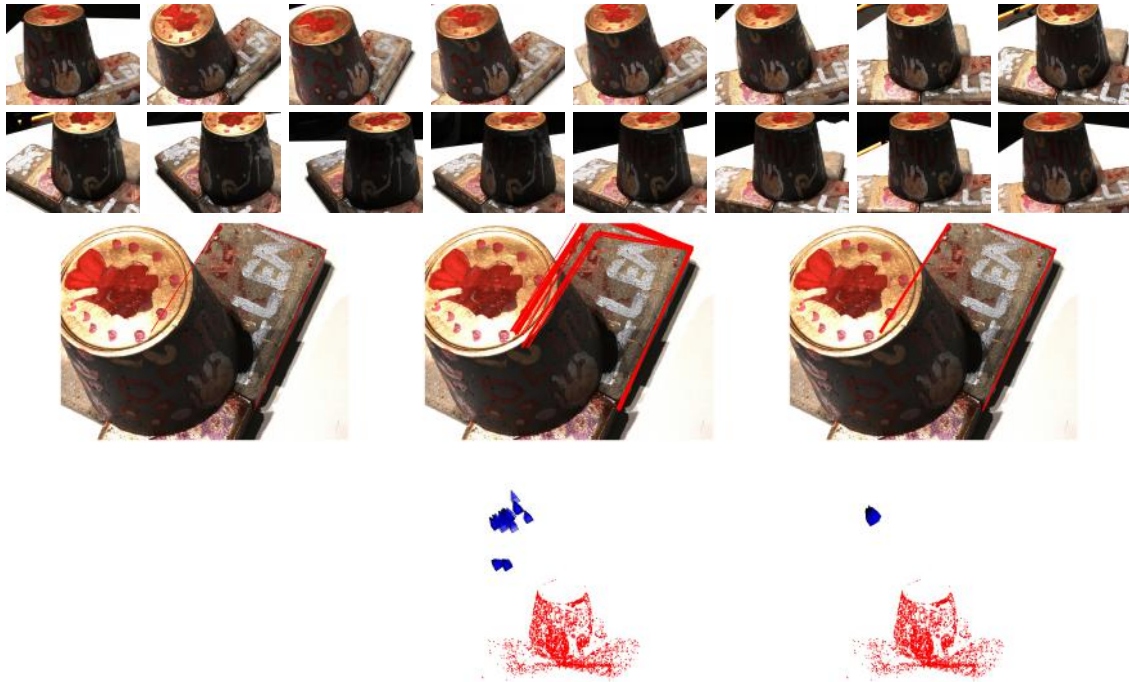


FIGURE 2 – pot dataset. The first and second row displays samples of the construction views. The third row displays the query view with manually extracted scene edges (left), the reprojection of these edges using 100 pose computed from the SfM model (middle) and from the model with synthetic patches (right). The fourth row shows the 100 computed poses from the SfM model (left) and from the enriched model (right).

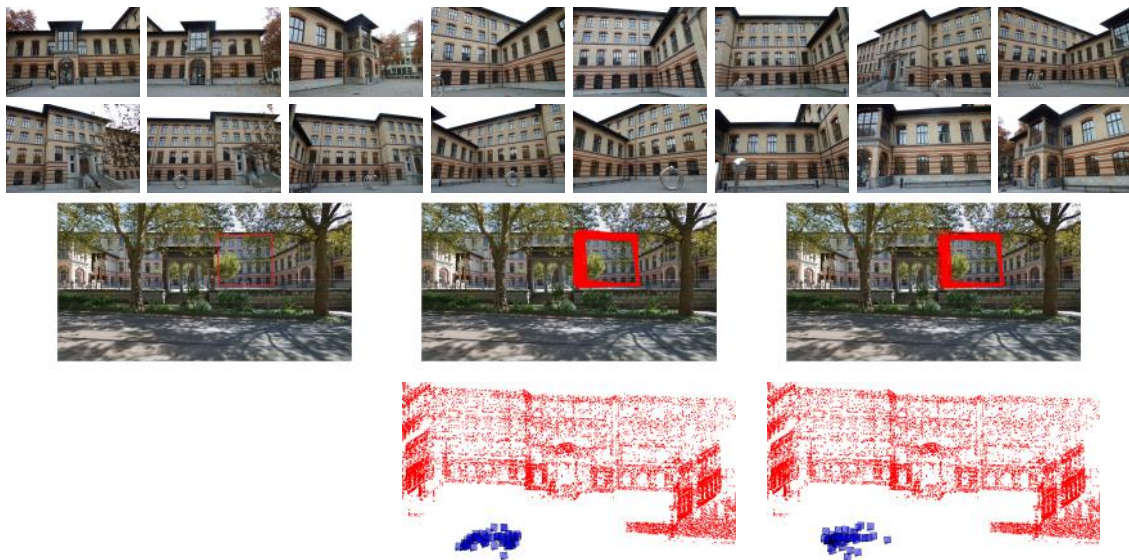


FIGURE 3 – CAB dataset. The first and second row displays samples of the construction views. The third row displays the query view with manually extracted scene edges (left), the reprojection of these edges using 100 pose computed from the SfM model (middle) and from the model with synthetic patches (right). The fourth row shows the 100 computed poses from the SfM model (left) and from the enriched model (right). On this dataset, the improvement of the pose localization is not clearly visible because of the density of the reprojected rectangles and of the cameras. Nevertheless, the accuracy measurements given in the paper (in Table 2) show that the error is significantly lower when using the synthetic patches.