Supplementary material for
ReconNet: Non-Iterative Reconstruction of Images from Compressively Sensed Measurements

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Figure 1: The figure shows qualitative results on tracking for 8 videos. The red bounding box is the location for ReconNet+KCF at 0.01 measurement rate, and the blue bounding box is the location for original videos + KCF.

1. More results

Reconstruction from noiseless CS measurements: In table 1 of the main paper, we presented the peak signal-to-noise ratio values for 4 of the 11 test images. Here, the PSNR values (in dB) for the remaining 7 test images for various measurement rates are presented in Table 1.

Real-time high level vision from CS imagers: In the section 6 of the main paper, we showed the variation of average precision for 15 publicly available videos [5] (BlurBody, BlurCar1, BlurCar2, BlurCar4, BlurFace, BlurOwl,
The reconstructed frames do not retain fine-grained information to reliably track medium to large sized targets. This indicates that the performance of ReconNet+KCF at measurement rate of 0.01 and original videos + KCF. Here, in figure 1 we present qualitative results for 8 of those videos by overlaying the reconstructed frames with the original frames. The bounding boxes predicted by ReconNet+KCF (in red) and original videos+KCF (in blue). It can be seen that for the videos where the target object is of reasonably large size, ReconNet+KCF performs nearly as well as original videos + KCF. This indicates that the reconstruction output by ReconNet retain enough semantic information to reliably track medium to large sized targets. However, for very small sized targets, ReconNet+KCF performs poorly indicating that at measurement rate of 0.01, the reconstructed frames do not retain fine-grained information in the images.

### References


