

The Distribution of Matching Distances

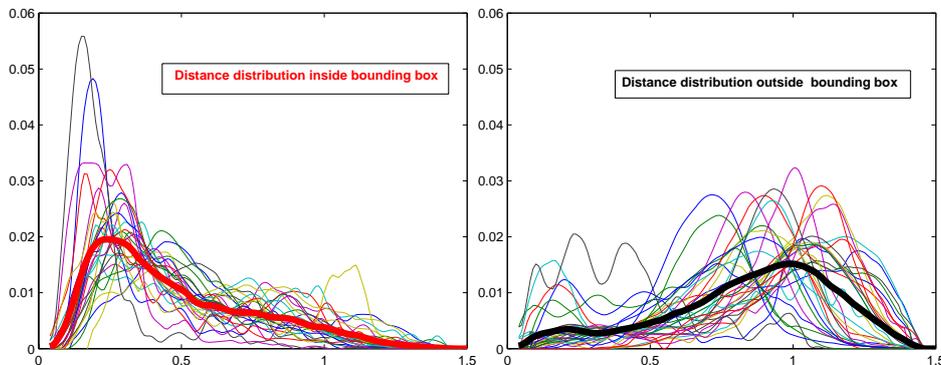


Figure 1: The distributions learned from labeled examples. The correct rectangular bounding box of each repetition region is labeled, and the matching at the corresponding intervals is done inside the bounding box and outside the bounding box (only extend vertically). Note that not all pixels inside the boundingbox are correct, as the inlier ratio is typically only around 80%. The thin curves are random examples from individual images, and the thick curves in the two figures are the average distribution. The outside-bounding-box distribution has occasionally small matching distances because of small repetitive structures and homogeneous regions.

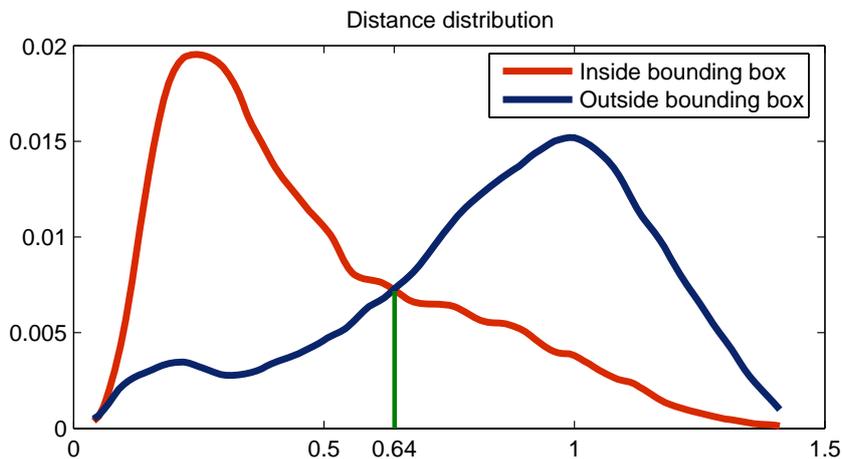


Figure 2: The two average distribution curves. Since we always expect that inliers are more than half in the initially detected region, the intersection of the two curves gives us the threshold 0.64 such that the probability of being inlier for a distance smaller than it is higher the probability of being outlier.