



Fig. 5.7: **Comparison between density forests and non parametric estimators.** (a) Input unlabelled points for three different experiments. (b) Forest-based densities. Forests were computed with $T = 200$ and varying depth D . (c) Parzen window densities (with Gaussian kernel). (d) K-nearest neighbour densities. In all cases parameters were optimized to achieve the best possible results. Notice the abundant artifacts in (c) and (d) as compared to the smoother forest estimates in (b).

domness (either in a forest model or in a Gaussian mixture model) yields improved results. Possible issues with EM getting stuck in local minima produce artifacts which appear to be mitigated in the forest model. Let us now look at differences in terms of computational cost.