(a) Paradigm Comparison (Top: Previous method; Bottom: Our method)

(b) Illustration of keypoints in case of VFSS and its skeleton heatmap
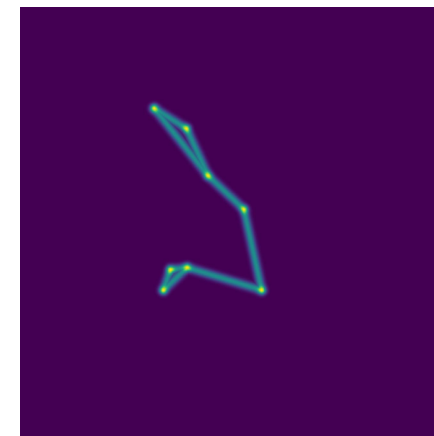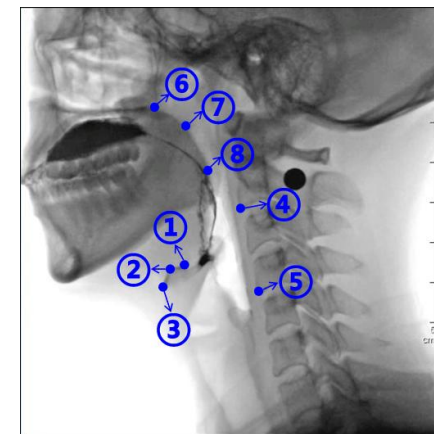
① Superior point of the anterior hyoid bone

② Anterior point of the hyoid bone

③ Inferior point of the hyoid bone

④ Anterior–inferior corner of the C2 vertebra

⑤ Anterior–inferior corner of the C4 vertebra

⑥ Anterior point of the soft palate

⑦ Midpoint of the soft palate

⑧ Inferior point of the soft palate