

Combined Active Contour Models and Convolutional Neural Networks for Fetal Head Segmentation in Ultrasound Image

In the proposed method, Convolutional Neural Networks (CNNs) are first employed to derive the external forces for an active contour model. The active contour model are then used to detect the object boundary based on the external forces obtained from the trained CNNs. The object boundary detected by the active contour models is fitted by an ellipse as the final result.