

Dilated U-Net for Fetal Head Segmentation in Ultrasound Image

The method we proposed mainly consists of two steps: Firstly, the probability map of fetal head location was predicted by a modified U-Net. In order to exploit context information of the target object, we added a dilated convolution block in the bottleneck of U-Net (i.e. between the encoder and decoder). Secondly, the object boundary on the probability map was fitted by an ellipse using least square kernel method.