

Title: Fully automated preoperative segmentation of temporal bone structures from clinical CT scans

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SUPPLEMENTARY TABLE S2

More details of the training parameters from the High level API interface in Clara SDK.

AH-Net details

Optimizer: Adam

Total epochs: 2000,

Number of epochs for validation: 10,

Learning rate: 0.0001,

Multi-GPU: true,

Learning rate policy : Step decay:

Decay ratio: 0.33,

Decay frequency: 400 epochs,

Segmentation architecture: AH-Net

Number of spacial dimensions: 3

Dropout: false

Final activation layer: Softmax

Dynamic_input_shape : true,

Scale Intensity Range:

Fields: "image",

"a_min": -500,

"a_max": 2000,

"b_min": 0.0,

"b_max": 1.0,

"clip": true

Scale Intensity Oscillation:

Fields: "image",

"magnitude": 0.10

"probability": 0.10

ResNet

Optimizer: Adam

Total epochs: 2000,

Number of epochs for validation: 10,

Learning rate: 0.0001,

Multi-GPU: true,

Learning rate policy : Step decay:

Decay ratio: 0.33,

Decay frequency: 400 epochs,

Segmentation architecture: 3D ResNet

Encoder layer number and ResNet block number of every layer: 1,2,2,4

Decoder layer number and ResNet block number of every layer: 1,1,1

Convolution kernel number of first layer: 16,

Dropout rate for several layers in training: 0.0,

Final activation layer: Softmax

Dynamic_input_shape : false,

Scale Intensity Range:

Fields: "image",

"a_min": -500,

"a_max": 2000,

"b_min": 0.0,

"b_max": 1.0,

"clip": true

Scale Intensity Oscillation:

Fields: "image",

"magnitude": 0.10

"probability": 0.10

U-Net

Optimizer: Adam

Total epochs: 2000,

Number of epochs for validation: 10,

Learning rate: 0.0001,

Multi-GPU: true,

Learning rate policy : Step decay:

Decay ratio: 0.33,

Decay frequency: 400 epochs,

Segmentation architecture: U-Net

Number of filters in each encoder layer: "32,64,64,64",

Number of filters in each decoder layer: "64,64,64,64,32,32",

Dropout rate for several layers in training: 0.0,

Final activation layer: Softmax

Dynamic_input_shape : false,

Scale Intensity Range:

Fields: "image",

"a_min": -500,

"a_max": 2000,

"b_min": 0.0,

"b_max": 1.0,

"clip": true

Scale Intensity Oscillation:

Fields: "image",

"magnitude": 0.10

"probability": 0.10