

图像 [bsz, 3, H, W]

点云 [bsz, 9, npts]

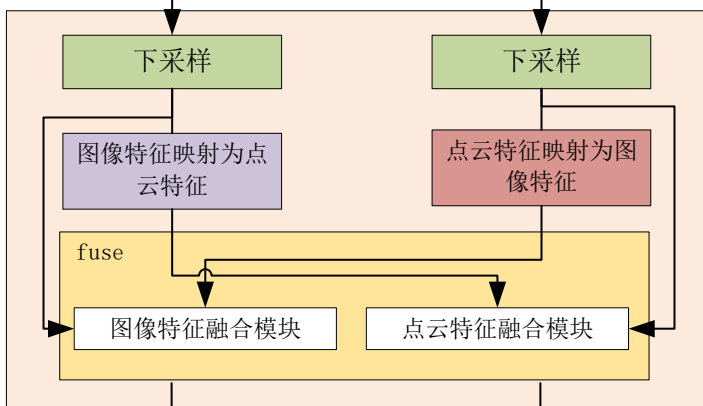


图像分支预处理

点云分支预处理

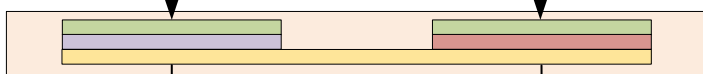
[bsz, 128, H/4, W/4]

[bsz, 8, npts, 1]



[bsz, 128, H/4, W/4]

[bsz, 64, npts/4, 1]



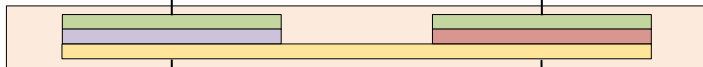
[bsz, 256, H/8, W/8]

[bsz, 128, npts/16, 1]



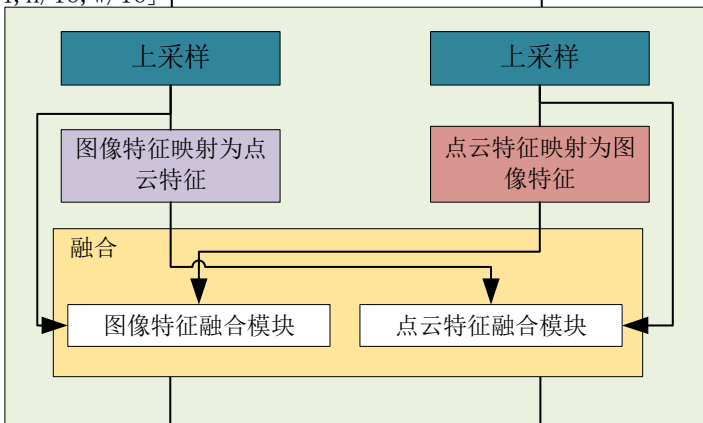
[bsz, 512, H/16, W/16]

[bsz, 256, npts/64, 1]



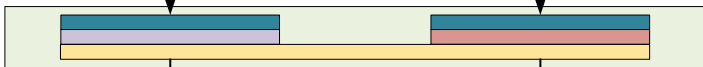
[bsz, 1024, H/16, W/16]

[bsz, 512, npts/256, 1]



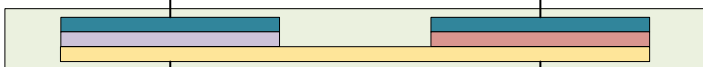
[bsz, 256, H/8, W/8]

[bsz, 256, npts/64, 1]



[bsz, 64, H/4, W/4]

[bsz, 128, npts/16, 1]



[bsz, 64, H/4, W/4]

[bsz, 64, npts/4, 1]



[bsz, 64, npts]

[bsz, 64, npts]

预测头

掩码

[bsz, 1, npts]

二进制编码

[bsz, 16, npts]

bsz 批大小

H/W 特征高度和宽度

npts 点云或特征数量

编码层

解码层

级联过程