Conv block 1: Conv block 2: Conv block 3: 3 x 3 conv 64 3 x 3 conv 128 3 x 3 conv 256 3 x 3 conv 64 3 x 3 conv 128 3 x 3 conv 256

FeatMap-Net

3 x 3 conv 256 2 x 2 pooling 2 x 2 pooling Conv block 5:

Conv block 6: Conv block 4: 3 x 3 conv 512 3 x 3 conv 512

2 x 2 pooling

3 x 3 conv 512 3 x 3 conv 512 3 x 3 conv 512 2 x 2 pooling 2 x 2 pooling 7 x 7 conv 4096

Pairwise-Net **Unary-Net** 

2 fully-connected layers:

2 fully-connected layers:

Fully-con 512 Fully-con 512

Fully-con K<sup>2</sup> Fully-con K