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Brief Explanation of Method

In this approach, the SegNet architecture was trained using the SpaceNet dataset depicting Rio de Janeiro. After that, the trained weights of SegNet were employed to initialize the encoder part of a U-Net. The training of U-Net was then performed using the Inria Aerial Image Labeling Dataset taking also advantage of the LovaszSoftmax loss function (<https://github.com/bermanmaxim/LovaszSoftmax>). Finally, the probabilities produced by the U-Net network for the testing images were thresholded, assigning the value of 255 to probabilities higher than 0.3, while probabilities lower than 0.3 were given the value of zero.