Technical Report

Using Deep Fully Convolutional Neural Network To Perform Semantic Aerial Image Segmentation, Applied For Vaihingen Dataset

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I use Fully Convolutional DenseNet (67 layers) as describe in the paper [1] to tackle this problem. I use 12 in 16 tiles for training and 4 remainings to validate the model. For each tiles, I crop randomly 3333 images with size (224,224). For testing phase, I perform sliding window and use the model to infer each small (224,224) patch with overlap 112 and then sew it to reform the original patch. No post processing is performed. This time, I use 5 channels include IRRG, DSM, and nDSM to train the model.

Reference:

[1] One Hundred Layers Tiramisu: Fully Convolutional DenseNets for Semantic Segmentation