

Method Description for Potsdam 2D Labelling challenge

Guodong Wu, Xiaodong Xu, and Wei Li

College of Information Science & Technology, Beijing University of Chemical Technology, Beijing 100029 China

For this challenge, we employ an end-to-end convolutional neural network to realize satellite imagery segmentation. The main idea is to supply a usual contracting network by successive layers, where pooling operators are replaced by upsampling operators. Hence, these layers increase the resolution of the output. In order to localize, high resolution features from the contracting path are combined with upsampled output. A successive convolution layer can then learn to assemble a more precise output based on this information. The end-to-end network architecture is illustrated in Fig. 1. We use both RGBIR and DSM images of Potsdam offered by organizer.

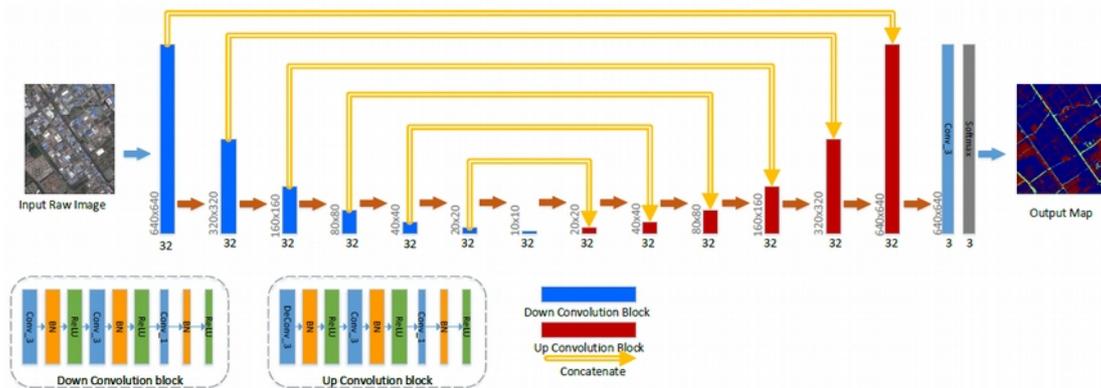


Fig. 1. The architecture of end-to-end CNN.