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SEGMENTATION OF WATER-BODIES IN DUBAI-SAT2 IMAGES WITH DEEP CONVOLUTIONAL NEURAL NETWORK

Abstract

Nowadays, water extraction from remote sensing images has become important for many environmental monitoring and assessment applications. For this research study, a semantic segmentation technique is developed to automatically extract water-bodies from DubaiSat-2 images. The proposed method uses a deep convolutional neural network (DCNN) based transfer learning approach. Different evaluation metrics will be used to assess the performance of our proposed algorithm such as accuracy, precision, and Jaccard coefficient. The overall accuracy for the prediction of water-bodies from DubaiSat-2 image dataset is 99.86