This method uses “low-level shallow features + DBN” structure. The submitted results are produced only using image information, without DSM data.

The core steps go as the follows:
1) extract multiple types of low-level features including LBP, SIFT, and Color features for each pixel of the input image.
2) generate a mid-level feature vector for each super-pixel by integrating the low-level features of the pixels within super-pixel segmentations;
3) use DBNs model to construct a high-level feature vector from mid-level feature vector for each super-pixel.
4) perform one-versus-all annotation by using softmax regression after obtaining high-level features.