

Weekly Report

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Abstract—This week I mainly put my effort on improving deep learning methods accuracy of building extraction.

I. SAR CONTEST

THIS week is the last week of the competition, and we have 2 chances left to upload our software.

- Last week we used data augmentation to augment the small dataset. Specifically, we flipped images horizontally and vertically, besides, we rotated images every 90° . The result had increased by 1.5%.
- So we tried to rotate images every 30° . With this dataset, we got about 1.5% increment on validation set. We handed this version of software as the final one.
- The final result showed the F1 score of 61.8%, which ranked 4th. From the result of ship detection, we found that committee had changed the test set since the history version of ship detection showed a different score. This is not so standard.
- After the competition, we have experienced the whole procedure of algorithm competition. We have tried many tricks we only met in papers but haven't tested by ourselves. We are more familiar with the practical situation and corresponding solutions, which are necessary in projects.

Fig. 1 is the final neural network result. Fig. 2 is the ground truth image.



Fig. 1: Final result

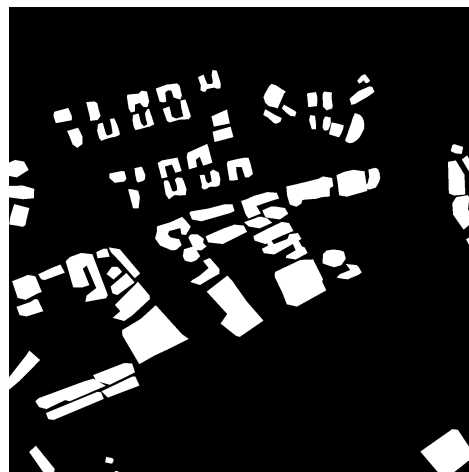


Fig. 2: Ground Truth