

Weekly Report

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Abstract—This week I mainly put my effort on testing the images given by contest committee and packing codes to EXE file.

I. ALGORITHM TEST

SINCE contest committee gave some training SAR images, I used these images to train models.

- The contest committee gave us 10 SAR building images, whose size is $1,500 \times 1,500$.
- At first, I choose 7 images to train, 1 to validate and the last 2 to test. I slice theses images to small ones with size of 512×512 without overlapping. Finally I get 63 training images of 512×512 .
- The result shows that the F1 score, which is used by the contest, is about $0.5 \sim 0.6$. This is on the average.

Fig. 1 is the ground truth image. Fig. 2 is the predicted image.

II. SOFTWARE PACKING

According to the contest requirement, we need to pack codes to EXE format and run it on Win 7/10 with CUDA 8.0/9.0 platform.

- The code of SAR image building extraction uses TensorFlow framework. It supports Windows well and I run the code on Dell laptop with Win 10, CUDA 8 and Python 3.5 correctly.
- However, when I try to pack it with Pyinstaller, it reported some mistakes. After some trials, I changed the work directory in the code and it works as expected.
- Then I gave Lei Xu the code, and he mailed it to the appointed mailbox on Saturday.



Fig. 1: Ground truth image



Fig. 2: Predicted image