Weekly Report

Adviser: Prof. Yang Wen Student: Cheng Wensheng Period: 2018.4.16-4.20

Abstract—This week I mainly put my effort on revising CETC 54 technical report.

I. WORK SUMMARY

N work summary report, the first party raised following questions, and we revised them correspondingly.

- About semantic annotation, they think we didn't state
 the annotation process clearly. Besides, since GAN didn't
 work well on our dataset, there is no need to introduce
 it in detail. So I delete contents about GAN, then fill
 semantic annotation part with Refine Net, which got the
 best result.
- About Content Based Image Retrieval(CBIR) process, they argue that we didn't explain this in detail, and we only presented CAMs. As for this, I add specific illustration about CBIR and similarity based image retrieval.
- Fig. 1 is CBIR flow chart. Fig. 2 is semantic segmentation results.

II. TECHNICAL SUMMARY

In technical summary report, they focus on CBIR and semantic annotation parts.

- About CBIR, they suggest we put more attention to the concrete procedure. Therefore, I add CBIR flow chart and detailed account based on our PowerPoint file.
- About semantic annotation, they claimed we just listed some methods without comparing them. In response to this, I add our experiment result table to this part, and compare them by P-R curve and mIoU. That should be enough.

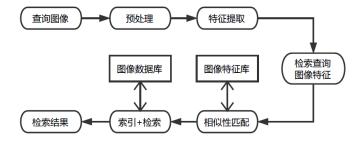


Fig. 1: CBIR flow chart

模型	GAN	FC-DenseNet	PSP-Net	GCN	Refine-Net	DeeplabV3
水域	47.94%	95.25%	91.44%	93.79%	97.10%	93.64%
绿化区	42.06%	94.90%	94.02%	94.39%	94.52%	93.95%
房子	73.64%	82.10%	79.33%	84.38%	79.24%	78.81%
道路	50.05%	65.03%	60.54%	65.45%	65.78%	54.04%
背景	84.37%	83.15%	81.50%	81.87%	87.94%	82.81%
Precision	75.54%	79.51%	77.13%	80.08%	80.56%	78.14%

Fig. 2: Semantic segmentation results