About Performance Evaluation in the Edge Detection problem

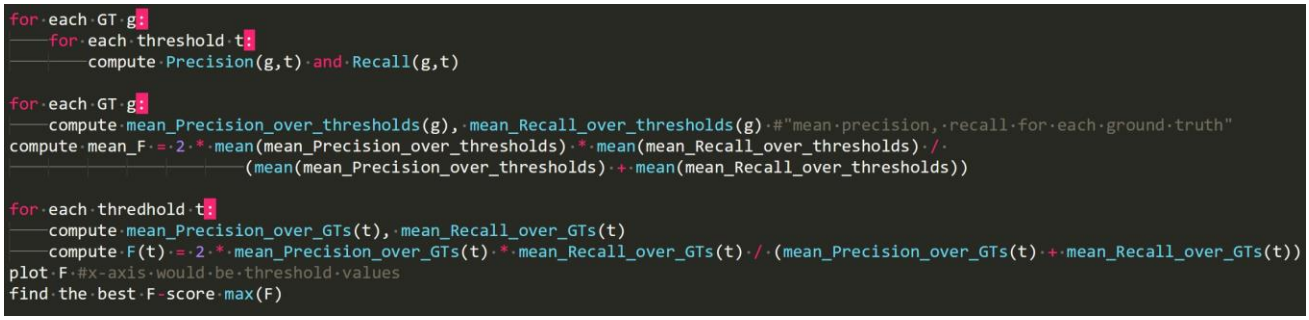
Posted Feb 7, 2019 2:45 PM

Dear all,

Please refer to the attached pseudo code for your tasks in the Performance Evaluation problem of Edge detection.

Best regards,

TA team



```
for each GT g:
    for each threshold t:
        compute Precision(g,t) and Recall(g,t)

for each GT g:
    compute mean_Precision_over_thresholds(g), mean_Recall_over_thresholds(g) #"mean precision, recall for each ground truth"
compute mean_F = 2 * mean(mean_Precision_over_thresholds) * mean(mean_Recall_over_thresholds) /
                 (mean(mean_Precision_over_thresholds) + mean(mean_Recall_over_thresholds))

for each thredhold t:
    compute mean_Precision_over_GTs(t), mean_Recall_over_GTs(t)
    compute F(t) = 2 * mean_Precision_over_GTs(t) * mean_Recall_over_GTs(t) / (mean_Precision_over_GTs(t) + mean_Recall_over_GTs(t))
plot F #x-axis would be threshold values
find the best F-score max(F)
```