lg-genpredcsreport

March 2, 2021

```
Data filename :  /workspace/for_luis/2020-04-09_final_4_volumes_combined.h5

Shape:  (2120, 2520, 2520)

Values: max = 12 , min = 0
```

1 Consistency score (CS)

```
Weighting data to get consistency score using method MaxMinSquare

Consistency score whole volume average = 32.36612531003841

Manually segmented volume [ 897:1153 , 185:441 , 1750:2006 ] has consistency
score of 34.89721089601517 .
```

2 Average pooling of CS

Parameters used for average pooling

```
Sub-volume width : 256
Stride (jump) : 128

Consistency Score AvgPool3D data filename:
2020-04-09_final_4_volumes_combined_VolAvg_k256_s128.h5

File already exists, and recalculation is not required so the results in this
file will be used
```

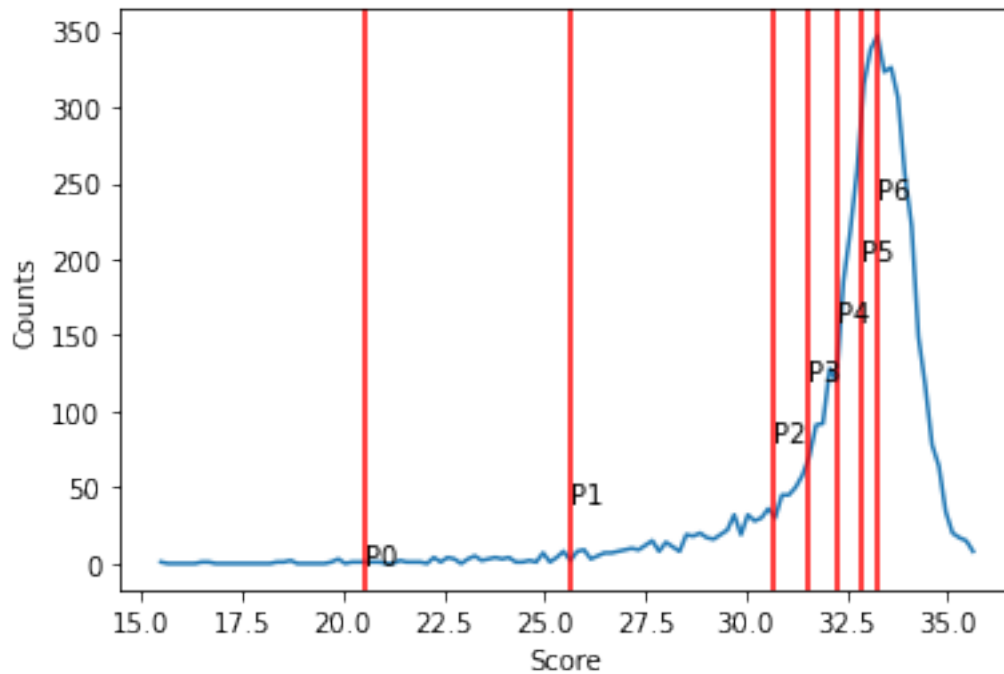## 3 Histogram of Consistency score and regions-of-interest

Blue - Consistency score histogram
red lines - points of interest
green line - consistency score for the region that was manually segmented

```
Gaussian fit to peak, parameters amplitude=336.99165968746934 ,
mean=33.27826868431828 ,stdev=0.842132052886519
```

P0 [1792:2048 , 1536:1792 , 128:384] centered at (1920, 1664, 256)
cscore=20.512474536895752
P1 [1792:2048 , 1664:1920 , 128:384] centered at (1920, 1792, 256)
cscore=25.616242706775665
P2 [640:896 , 640:896 , 1024:1280] centered at (768, 768, 1152)
cscore=30.682079195976257
P3 [640:896 , 1152:1408 , 768:1024] centered at (768, 1280, 896)
cscore=31.506973445415497
P4 [640:896 , 1152:1408 , 1024:1280] centered at (768, 1280, 1152)
cscore=32.287492752075195
P5 [768:1024 , 1024:1280 , 1152:1408] centered at (896, 1152, 1280)
cscore=32.877247393131256
P6 [768:1024 , 896:1152 , 1024:1280] centered at (896, 1024, 1152)
cscore=33.244472205638885

4   Manually segmented volumes - CS

V0 [897:1153 , 185:441 , 1750:2006] , consistency score of 34.89721089601517
V1 [512:768 , 1280:1536 , 1536:1792] , consistency score of 34.19626897573471
V2 [0:256 , 1536:1792 , 1792:2048] , consistency score of 33.13370609283447
V3 [0:256 , 1024:1280 , 512:768] , consistency score of 34.22354298830032
V4 [1536:1792 , 256:512 , 0:256] , consistency score of 29.879499673843384
V5 [684:1068 , 2012:2396 , 455:839] , consistency score of 33.61268769370185

V6 [1067:1991 , 1074:1458 , 1352:1736] , consistency score of
33.33952846040859