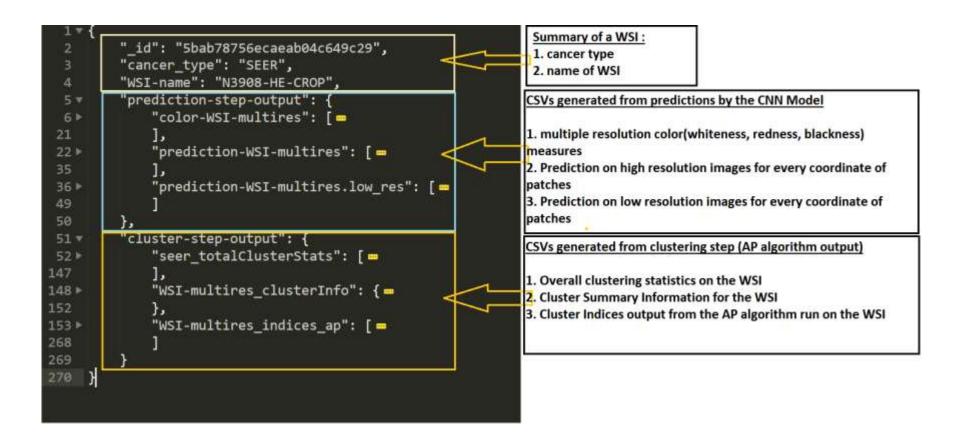
# Contents

Overall SEER JSON Structure	2
Prediction Output Structure Explained	3
Color -WSI-MultiRes explained	
Prediction -WSI-MultiRes explained	
Prediction -WSI-MultiRes for low resolution images explained	
Cluster Output Structure Explained	
Overall cluster statistics output	
Overall cluster summary information	
Cluster Indices output (AP algorithm)	8

#### **Overall SEER JSON Structure**

The complete JSON file is available here in Github. SEER.json



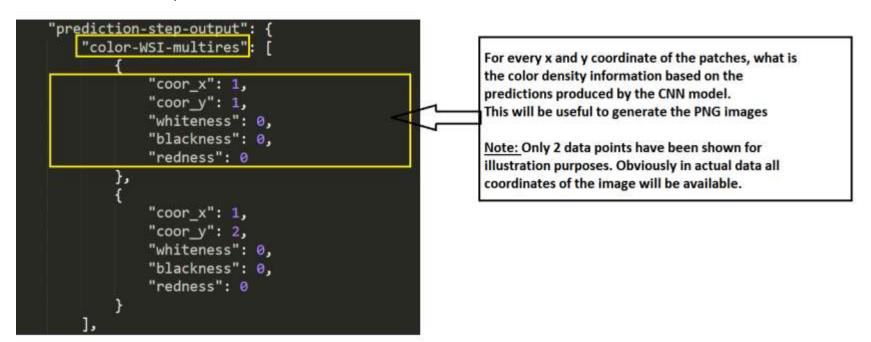
# **Prediction Output Structure Explained**

These outputs reside in the following folder structure:

<TIL root>/data/heatmap\_txt/

<TIL root>/cluster\_indices/input/seer

#### Color -WSI-MultiRes explained



### Prediction -WSI-MultiRes explained

For each coordinate of x and y in the patch, this section captures the following

bin\_value: TIL/No-TIL(1/0)

real\_value: Actual Probability predicted value

### Prediction -WSI-MultiRes for low resolution images explained

```
"prediction-step-output": {
    "color-WSI-multires": [ --
    "prediction-WSI-multires": [ =
                                                       For low resolution images in each coordinate of x
    "prediction-WSI-multires.low res": [
                                                       and y, this section conveys the following
                                                       information:
             "patch_index_x": 392,
             "patch_index_y": 392,
                                                        1. bin_value: Til/No Til (1/0)
             "bin value": 0,
                                                       2. real_value: Actual Probability value
             "real_value": 0.004871
             "patch_index_x": 392,
             "patch_index_y": 1176,
             "bin value": 0,
             "real_value": 0.005726
```

### **Cluster Output Structure Explained**

Cluster Index Step CSV outputs are available here:

<TIL root>/cluster\_indices/output/<cancer-type>

<TIL root>/cluster\_indices/output/seer

#### Overall cluster statistics output

```
"cluster-step-output":
   "seer totalClusterStats"
           "Slides": "N3908-HE-CROP-multires.csv",
           "number of data points": 363,
           "number of clusters": 4,
           "Ball Hall": 727.033492228104,
           "Banfeld_Raftery": 2335.98088004097,
           "C index": 0.0335152159541665,
           "Calinski Harabasz": 968.214411749257,
           "Davies Bouldin": 0.430478646107358,
           "Det Ratio": 59.3988774907265,
           "Dunn": 0.052702797742987,
           "Gamma": 0.917867183685303,
           "G plus": 0.0164737177128835,
           "GDI11": 0.052702797742987,
           "GDI12": 0.339330435992321,
           "GDI13": 0.108306441285547,
           "GDI21": 1.28806866834899,
```

This is the first section of the clustering output.

This section represents the overall cluster statistics for each WSI. Some of the fields have been listed, the actual JSON has all the fields available as part of this statistics.

## Overall cluster summary information

### Cluster Indices output (AP algorithm)

```
"cluster-step-output": {
51 v
52 ≯
              "seer_totalClusterStats": [ -
147
              "WSI-multires_clusterInfo": {-
148 ▶
152
             "WSI-multires indices ap":
153 v
154 v
                      "Slides": "TCGA-05-4396-01Z-00-DX1",
155
                      "Ball Hall": "NA",
156
                      "Banfeld Raftery": "NA",
                      "C index": "NA",
158
                      "Calinski Harabasz": "NA",
159
                      "Davies Bouldin": "NA",
                      "Det Ratio": "NA",
                      "Dunn": "NA",
162
                      "Gamma": "NA",
                      "G plus": "NA",
                      "GDI11": "NA",
                      "GDI12": "NA",
                      "GDI13": "NA",
                      "GDI21": "NA",
168
                      "GDI22": "NA",
169
                      "GDI23": "NA",
170
171
                      "GDI31": "NA",
172
                      "GDI32": "NA",
                      "GDI33": "NA",
173
                      "GDI41": "NA",
174
                      "GDI42": "NA".
```

This section captures the output as part of the clustering indexing step by the AP algorithm:

It is an array of data elements (a subset has been shown for illustration purposes).