[WARNING] This document format requires a nonempty

Occupancy Map

Images are fed with the texts detected and bounded with red boxes using CRAFT NN

1. **Save copy of original image**

2. **PreProcess copy of original image**
    a. Convert to Gray
    b. Gaussian Blur
    c. Binary INV
    d. CLOSE operation
    e. Dilation

3. **Finding Contours**

4. **Draw contours having area$>0.6\cdot$(image area) with white on copy of original image**

    steps 2, 3, 4 will eliminate any artificial contours arisen on the borders of image

5. **Set pixels with red values<230 to 255 (maximum)**

6. **Preprocess image from *step 5.***
    a. Convert to Gray
    b. Binary INV
    c. Dilation

7. **Find contours of image grom *step 6* and draw the contours**

8. **Fill contours with white**

9. **Dilate the resulted image from *step 8***

    steps 5, 6, 7, 8, 9 will remove the detected texts on image.

10. **Preprocess the copy of original image**
    a. To Gray
    b. Gaussian Blur
    c. Adaptive Gaussian Image

11. **Draw contounrs from *step 3* on the image from *step 10***

12. **Add image from *step 9* to image from *step 11***

13. **Process image from *step 12***
    a. OPEN
    b. CLOSE
    c. Dilation
    d. Reverse image matrix entries with logical not operation

14. **Find contours from *step 13***

    ::If contour area>0.7$cdot$(image area), whiten it. #this step is to remove any artificial contours that can arise from morph operations such as dilation

15. **Find edges on image from *step 14* with Canny/Laplacian**

16. **Dilate image from *step 15***

17. **Find contours on image from *step 16***

18. **Take the contour with the highest area**

19. **Crop the copy of original image bounding the contourat the contour from *step 18* + some allowances on width and height**