Panoptic Segmentation using DETR

Status as of 03 – 05 – 2022

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GitHub Repo Link

https://github.com/amanjain487/panoptic-segmentation-using-DETR

Detailed Workflow:

1. Gather Images
2. Annotate Images
3. Get COCO annotation from Facebook DETR
4. Merge COCO annotation and construction annotation and create final Category Mapping
5. Create Final Dataset
6. Create Mask Images for Panoptic Training
7. Create Bounding Box Annotation JSON for Object Detection Model
8. Create Segmentation Annotation JSON for Panoptic Segmentation Model
9. Split Dataset into Train 80% - Test 20%
10. Build Detection Model
11. Train Detection Model
12. Apply Different Transformations while Training
13. Test Detection Model

14. ~~Regularize or Hyper parameterize Model based on Test Results~~
15. ~~Visualize Loss and Accuracy~~
16. ~~Visualize sample Bounding Box Predictions~~
17. ~~**Build Segmentation Model**~~
18. ~~**Train Segmentation Model**~~
19. ~~**Apply different Transformations while Training**~~
20. Test Segmentation Model
21. Regularize or Hyper parameterize Model based on Test Results
22. Visualize Loss and Accuracy
23. Visualize sample Panoptic Predictions

Legends:

~~Strike Grey Highlighted Text~~ – Completed

Blue Highlighted Bold Text – Currently Going on

Normal Text – Future Work Pending