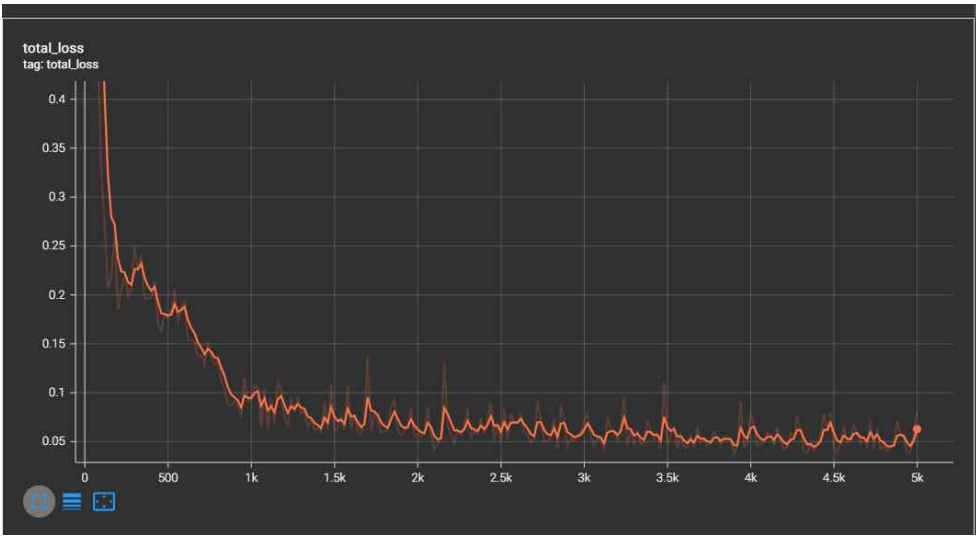
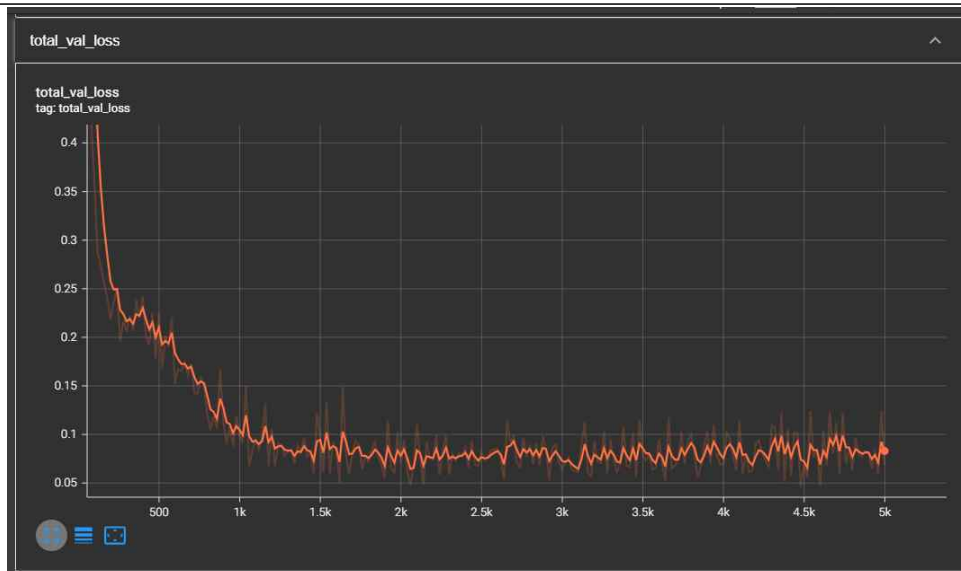


# 캡스톤디자인 면담 확인서

팀원	서승우		
주제	Detectron2를 활용한 Object detection 기술 연구		
면담일시	2022. 6. 5.	지도교수	김휘용
면담내용	<p>-Detectron2를 활용하여 이미지에서 차량의 번호판을 검출</p> <p>(아래 사항들은 이전 면담 사항에서 수정, 보완하기로 했던 내용)</p> <ol style="list-style-type: none"> <li>1. 화질 개선</li> <li>2. Train loss function을 그래프로 그려보기</li> <li>3. Validation loss function을 그래프로 그려보기</li> <li>4. 다수의 차량번호판을 검출하기</li> <li>5. mAP를 표시하기</li> </ol> <p>위의 내용을 수정·보완하였고 loss function을 그려보아 결과물이 나오게 되었으므로 동기와 활용에 대해서 조금 더 생각해보고 최종보고서 작성과 발표영상에 반영하고 프로젝트를 마무리하기로 함.</p> 		



```
[06/04 18:15:20 d2.data.dataset_mapper]: [DatasetMapper] Augmentations used in Inference: (ResizeShortestEdge(short_edge_length=(800, 800), max_size=1333, sample_style='choice'))
[06/04 18:15:20 d2.data.common]: Serializing 71 elements to byte tensors and concatenating them all ...
[06/04 18:15:20 d2.evaluation.evaluator]: Serialized dataset takes 0.03 MiB
[06/04 18:15:20 d2.evaluation.evaluator]: Start Inference on 71 batches
[06/04 18:15:21 d2.evaluation.evaluator]: Inference done 11/71. Dataloading: 0.0011 s/iter. Inference: 0.1092 s/iter. Eval: 0.0002 s/iter. Total: 0.1105 s/iter. ETA=0:00:06
[06/04 18:15:26 d2.evaluation.evaluator]: Inference done 54/71. Dataloading: 0.0053 s/iter. Inference: 0.1107 s/iter. Eval: 0.0002 s/iter. Total: 0.1164 s/iter. ETA=0:00:01
[06/04 18:15:28 d2.evaluation.evaluator]: Total inference time: 0:00:07.721525 (0.116993 s / iter per device, on 1 devices)
[06/04 18:15:28 d2.evaluation.evaluator]: Total inference pure compute time: 0:00:07 (0.110814 s / iter per device, on 1 devices)
[06/04 18:15:28 d2.evaluation.coco_evaluation]: Preparing results for COCO format ...
[06/04 18:15:28 d2.evaluation.coco_evaluation]: Saving results to ./output/coco_instances_results.json
[06/04 18:15:28 d2.evaluation.coco_evaluation]: Evaluating predictions with unofficial COCO API...
Loading and preparing results...
DONE (t=0.00s)
creating index...
Index created!
[06/04 18:15:28 d2.evaluation.fast_eval_api]: Evaluate annotation type 'bbox'
[06/04 18:15:28 d2.evaluation.fast_eval_api]: COCOEval_opt.evaluate() finished in 0.02 seconds.
[06/04 18:15:28 d2.evaluation.fast_eval_api]: Accumulating evaluation results...
[06/04 18:15:28 d2.evaluation.fast_eval_api]: COCOEval_opt.accumulate() finished in 0.01 seconds.
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.594
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.829
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.695
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.401
Average Precision (AP) @[ IoU=0.50:0.95 | area= medium | maxDets=100 ] = 0.813
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.825
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets= 1 ] = 0.491
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets= 10 ] = 0.635
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.844
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.470
Average Recall (AR) @[ IoU=0.50:0.95 | area= medium | maxDets=100 ] = 0.854
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.843
[06/04 18:15:28 d2.evaluation.coco_evaluation]: Evaluation results for bbox:
| AP | AP50 | AP75 | APs | APm | API |
|-----|-----|-----|-----|-----|-----|
| 59.399 | 82.857 | 69.500 | 40.142 | 81.328 | 82.515 |
OrderedDict([('bbox', {'AP': 59.3992633934316, 'AP50': 82.85670460384537, 'AP75': 69.50031148564541, 'APs': 40.1420006870522, 'APm': 81.32829164958204, 'API': 82.51485148514851})])
```

