

Car Damage Dataset

허재호

mask_rcnn_r50_fpn_1x_coco

```
@DATASETS.register_module(force=True)
class CarDamageDataset(CocoDataset) :
    CLASSES = ('headlamp', 'rear_bumper', 'door', 'hood', 'front_bumper')

# config
config_file = "./configs/mask_rcnn/mask_rcnn_r50_fpn_1x_coco.py"
cfg = Config.fromfile(config_file)

# Learning rate Setting
cfg.optimizer.lr = 0.0025
cfg.lr_config.warmup = None
# cfg.lr_config.step = [80, 95]

# dataset
cfg.dataset_type = "CarDamageDataset"
cfg.data_root = "./car_damage_dataset/"

# train, val, test dataset path
cfg.data.train.type = 'CarDamageDataset'
cfg.data.train.ann_file = './car_damage_dataset/train/COCO_mul_train_annos.json'
cfg.data.train.img_prefix = './car_damage_dataset/train/'
cfg.data.train.pipeline[2].img_scale=(500,500)
cfg.data.train.pipeline[3].flip_ratio=0.3

cfg.data.val.type = 'CarDamageDataset'
cfg.data.val.ann_file = './car_damage_dataset/val/COCO_mul_val_annos.json'
cfg.data.val.img_prefix = './car_damage_dataset/val/'
cfg.data.val.pipeline[1].img_scale=(500,500)

cfg.data.test.type = 'CarDamageDataset'
cfg.data.test.ann_file = './car_damage_dataset/val/COCO_mul_val_annos.json'
cfg.data.test.img_prefix = './car_damage_dataset/val/'
cfg.data.test.pipeline[1].img_scale=(500,500)

cfg.model.roi_head.bbox_head.num_classes = 5
cfg.model.roi_head.mask_head.num_classes = 5
cfg.model.rpn_head.anchor_generator.scales = [4]

# Pretrained model
cfg.load_from = "./mask_rcnn_r50_fpn_1x_coco_20200205-d4b0c5d6.pth"

# weight file save path
cfg.work_dir = "./work_dirs/0810_mask_rcnn_fpx_1x_multi"
```

cascade_rcnn_r50_fpn_1x_coco

```
@DATASETS.register_module(force=True)
class CarDamageDataset(CocoDataset) :
    CLASSES = ('headlamp', 'rear_bumper', 'door', 'hood', 'front_bumper')

# config
config_file = "./configs/cascade_rcnn/cascade_mask_rcnn_r50_fpn_1x_coco.py"
cfg = Config.fromfile(config_file)

# Learning rate Setting
cfg.optimizer.lr = 0.0025
cfg.lr_config.warmup = None
# cfg.lr_config.step = [80, 95]

# dataset
cfg.dataset_type = "CarDamageDataset"
cfg.data_root = "./car_damage_dataset/"

# train, val, test dataset path
cfg.data.train.type = 'CarDamageDataset'
cfg.data.train.ann_file = './car_damage_dataset/train/COCO_mul_train_annos.json'
cfg.data.train.img_prefix = './car_damage_dataset/train/'
cfg.data.train.pipeline[2].img_scale=(512,512)
cfg.data.train.pipeline[3].flip_ratio=0.3

cfg.data.val.type = 'CarDamageDataset'
cfg.data.val.ann_file = './car_damage_dataset/val/COCO_mul_val_annos.json'
cfg.data.val.img_prefix = './car_damage_dataset/val/'
cfg.data.val.pipeline[1].img_scale=(512,512)

cfg.data.test.type = 'CarDamageDataset'
cfg.data.test.ann_file = './car_damage_dataset/val/COCO_mul_val_annos.json'
cfg.data.test.img_prefix = './car_damage_dataset/val/'
cfg.data.test.pipeline[1].img_scale=(512,512)

cfg.model.roi_head.bbox_head[0].num_classes = 5
cfg.model.roi_head.bbox_head[1].num_classes = 5
cfg.model.roi_head.bbox_head[2].num_classes = 5
cfg.model.roi_head.mask_head.num_classes = 5
cfg.model.rpn_head.anchor_generator.scales = [4]

# Pretrained model
cfg.load_from = "./cascade_rcnn_r50_fpn_1x_coco_20200316-3dc56deb.pth"

# weight file save path
cfg.work_dir = "./work_dirs/0810_cascade_rcnn_r50_fpn_1x_coco_multi"
```