

Custom Vision vs Own Model for object detection

Cel :

Celem naszego projektu jest wytrenowanie, zapoznanie się z modelami dla wykrywanie obiektów:

1. Azure Custom Vision
2. Mask R-CNN

oraz porównanie własnoręcznie wytrenowanych modeli z usługą udostępnioną przez Microsoft.

Azure Custom Vision dostarcza możliwość wykorzystania dwóch rodzaj modeli do widzenia komputerowego:

- modelu do klasyfikacji obrazów oraz
- modelu do detekcji obiektów.

W naszym projekcie wykorzystaliśmy drugi typ, ponieważ skupiamy się na wykrywaniu różnego rodzaju obiektów występujących na zdjęciach.

Mask R-CNN ResNet-50 FPN. Do trenowania tego modelu wykorzystaliśmy bibliotekę Pytorch.

Zdecydowaliśmy się na wybór tego modelu ze względu na to, że w dokumentacji wspomnianej biblioteki Pytorch osiąga on najlepsze rezultaty z dostępnych modeli.

Image 1 - Porównanie

Zbiory danych:

W celu porównania działania obu serwisów sprawdziliśmy trzy zbiory danych:

- Monkey, Cat and Dog detection (30 MB) - [Kaggle \(https://www.kaggle.com/tarunbisht11/yolo-animal-detection-small\)](https://www.kaggle.com/tarunbisht11/yolo-animal-detection-small),
- Fruit Images for Object Detection (28 MB) - [Kaggle \(https://www.kaggle.com/mbkinaci/fruit-images-for-object-detection?select=train_zip\)](https://www.kaggle.com/mbkinaci/fruit-images-for-object-detection?select=train_zip)
- Card detection (38,6 MB) - [Github \(https://github.com/EdjeElectronics/TensorFlow-Object-Detection-API-Tutorial-Train-Multiple-Objects-Windows-10/tree/master/images\)](https://github.com/EdjeElectronics/TensorFlow-Object-Detection-API-Tutorial-Train-Multiple-Objects-Windows-10/tree/master/images)

Poniżej zostały dostarczone wytrenowane modeli na wyżej omówionych zbiorach danych.

In [1]:

```
# Azure Machine Learning Configuration
```

Podłączanie bibliotek i pakietów:

In [1]:

```
import azureml.core
from azureml.core import Workspace
from dotenv import set_key, get_key, find_dotenv
from pathlib import Path
from utilities import get_auth
```

Pokazanie poprawnego podłączenie do Workspace Azure. Wyświetlenie wersji:

In [2]:

```
print("You are currently using version", azureml.core.VERSION, "of the Azure ML SDK")
```

You are currently using version 1.17.0 of the Azure ML SDK

Konfiguracja Azure oraz environment

In [3]:

```
import os
subscription_id = os.environ['SUB_ID']
resource_group = "ProjektAzure"
workspace_name = "ProjektAzure"
workspace_region = "East US"
```

Znajdowanie zasobu oraz podłączenie po przez kluczy oraz subskrypcje:

In [4]:

```
env_path = find_dotenv()
if env_path == "":
    Path(".env").touch()
    env_path = find_dotenv()
```

In [5]:

```
set_key(env_path, "subscription_id", subscription_id)
set_key(env_path, "resource_group", resource_group)
set_key(env_path, "workspace_name", workspace_name)
set_key(env_path, "workspace_region", workspace_region)
```

Out[5]:

(True, 'workspace_region', 'East US')

Stworzenie roboczego obszaru przy użyciu określonych parametrów i zapisanie szczegółów obszaru roboczego do pliku konfiguracyjnego:

In [7]:

```
# Create the workspace using the specified parameters
ws = Workspace.create(
    name=workspace_name,
    subscription_id=subscription_id,
    resource_group=resource_group,
    location=workspace_region,
    create_resource_group=True,
    auth=get_auth(env_path),
    exist_ok=True,
)

# write the details of the workspace to a configuration file
ws.write_config()
```

Poniżej można zobaczyć informację dotyczące roboczego obszaru:

In [8]:

```
# load workspace configuration
ws = Workspace.from_config(auth=get_auth(env_path))
ws.get_details()
```

Out[8]:

```
{'id': '/subscriptions/ldb0a5ce-7de1-4082-8e25-3c5a4e5a9a98/resourceGroups/ProjektAzure/providers/Microsoft.MachineLearningServices/workspaces/ProjektAzure',
 'name': 'ProjektAzure',
 'location': 'eastus',
 'type': 'Microsoft.MachineLearningServices/workspaces',
 'sku': 'Basic',
 'workspaceid': 'ec3d9bcd-0a08-464f-ae43-b69afde74018',
 'sdkTelemetryAppInsightsKey': 'f5784ccd-178d-4ecc-9998-b05841b44ae9',
 'description': '',
 'friendlyName': 'ProjektAzure',
 'creationTime': '2020-12-21T20:48:27.3350460+00:00',
 'keyVault': '/subscriptions/ldb0a5ce-7de1-4082-8e25-3c5a4e5a9a98/resourcegroups/projektazure/providers/microsoft.keyvault/vaults/projektakeyvaultceb809a5',
 'applicationInsights': '/subscriptions/ldb0a5ce-7de1-4082-8e25-3c5a4e5a9a98/resourcegroups/projektazure/providers/microsoft.insights/components/projektainsights99765023',
 'identityPrincipalId': '6bcd4c16-2e88-4cd9-afbd-81b67e195a4c',
 'identityTenantId': '3b50229c-cd78-4588-9bcf-97b7629e2f0f',
 'identityType': 'SystemAssigned',
 'storageAccount': '/subscriptions/ldb0a5ce-7de1-4082-8e25-3c5a4e5a9a98/resourcegroups/projektazure/providers/microsoft.storage/storageaccounts/projektastorage1d32b8c8a',
 'hbiWorkspace': False,
 'discoveryUrl': 'https://eastus.experiments.azureml.net/discovery',
 'notebookInfo': {'fqdn': 'ml-projektazure-eastus-ec3d9bcd-0a08-464f-ae43-b69afde74018.notebooks.azure.net',
 'resource_id': '9b6128a19f3147b8aef03640273f1951'}}
```

Poniżej jest importowanie bibliotek oraz podłączenie ścieżki do plików, które wskazują na moduły:

In []:

```
import sys

sys.path.append("scripts")
sys.path.append("scripts/cocoapi/PythonAPI/")

import azureml.core
from azureml.core import Workspace, Experiment
from azureml.widgets import RunDetails
from azureml.train.dnn import PyTorch

from dotenv import set_key, get_key, find_dotenv
from utilities import get_auth, download_data

import torch
from scripts.XMLDataset import BuildDataset, get_transform
from scripts.maskrcnn_model import get_model

from PIL import Image, ImageDraw
from IPython.display import display

# check core SDK version number
print("Azure ML SDK Version: ", azureml.core.VERSION)
```

In []:

```
#DALEJ NIE ODPALAJ
```

Implementacja Mask R-CNN model

In [9]:

```

%%writefile scripts/XMLDataset.py
import os
import xml.etree.ElementTree as ET
import torch
import transforms as T
from PIL import Image

class BuildDataset(torch.utils.data.Dataset):
    def __init__(self, root, dataset, transforms=None, train=True):
        self.root = root
        self.transforms = transforms
        #self.labels_dict = {'obama': 1}
        #self.labels_dict = {'ace': 1, 'king': 2, 'queen': 3, 'jack': 4, 'ten':
5, 'nine': 6}

#         self.labels_dict = {'cat': 1, 'dog': 2, 'monkey': 3}
#         self.labels_dict['cat'] = 1
#         self.labels_dict['dog'] = 2
#         self.labels_dict['monkey'] = 3
# load all image files
if dataset == "Fruit":
    self.labels_dict = {'apple': 1, 'orange': 2, 'banana': 3}
elif dataset == "PlayCards":
    self.labels_dict = {'ace': 1, 'king': 2, 'queen': 3, 'jack': 4, 'te
n': 5, 'nine': 6}
else:
    self.labels_dict = {'cat': 1, 'dog': 2, 'monkey': 3}
if train:
    print(f"Data/{dataset}/JPEGImages")
    print("Data/"+dataset+"/JPEGImages")
    self.imgs_path = os.path.join(root, f"Data/{dataset}/JPEGImages")
    print(type(dataset))
    self.imgs = list(sorted(os.listdir(self.imgs_path)))
    self.xmls_path = os.path.join(root, f"Data/{dataset}/Annotations")
else:
    self.imgs_path = os.path.join(root, f"Data/{dataset}/JPEGImagesTest"
)
    self.imgs = list(sorted(os.listdir(self.imgs_path)))
    self.xmls_path = os.path.join(root, f"Data/{dataset}/AnnotationsTes
t")

#         if train:
#             self.imgs_path = os.path.join(root, "Data/PlayCards/JPEGImages")
#             self.imgs = list(sorted(os.listdir(self.imgs_path)))
#             self.xmls_path = os.path.join(root, "Data/PlayCards/Annotations")
#         else:
#             self.imgs_path = os.path.join(root, "Data/PlayCards/JPEGImagesTes
t")
#             self.imgs = list(sorted(os.listdir(self.imgs_path)))
#             self.xmls_path = os.path.join(root, "Data/PlayCards/AnnotationsTes
t")
#         if train:
#             self.imgs_path = os.path.join(root, "Data/monkeyCats/JPEGImages")
#             self.imgs = list(sorted(os.listdir(self.imgs_path)))
#             self.xmls_path = os.path.join(root, "Data/monkeyCats/Annotations")
#         else:
#             self.imgs_path = os.path.join(root, "Data/monkeyCats/JPEGImagesTes
t")

```

```

#         self.imgs = list(sorted(os.listdir(self.imgs_path)))
#         self.xmls_path = os.path.join(root, "Data/monkeyCats/AnnotationsTe
st")

def __getitem__(self, idx):
    img_path = os.path.join(self.imgs_path, self.imgs[idx])
    xml_path = os.path.join(
        self.xmls_path, "{}.xml".format(self.imgs[idx].strip(".jpg"))
    )
    img = Image.open(img_path).convert("RGB")

    # parse XML annotation
    tree = ET.parse(xml_path)
    t_root = tree.getroot()

    # get bounding box coordinates
    boxes = []
    labels = []
    for obj in t_root.findall("object"):
        bnd_box = obj.find("bndbox")
        xmin = float(bnd_box.find("xmin").text)
        xmax = float(bnd_box.find("xmax").text)
        ymin = float(bnd_box.find("ymin").text)
        ymax = float(bnd_box.find("ymax").text)
        boxes.append([xmin, ymin, xmax, ymax])
        label_name = str(obj.find("name").text)
        if self.labels_dict:
            if label_name not in self.labels_dict.keys():
                self.labels_dict[label_name] = max(self.labels_dict.values
()) + 1
            else:
                self.labels_dict[label_name] = 1
            print(label_name + ": " + str(self.labels_dict[label_name]))
        labels.append(self.labels_dict[label_name])
    num_objs = len(boxes)
    boxes = torch.as_tensor(boxes, dtype=torch.float32)

    # there is only one class
    labels = torch.as_tensor(labels)
    print(labels)
    labels = torch.ones((num_objs,), dtype=torch.int64)
    image_id = torch.tensor([idx])

    # area of the bounding box, used during evaluation with the COCO metric
    for small, medium and large boxes
    area = (boxes[:, 3] - boxes[:, 1]) * (boxes[:, 2] - boxes[:, 0])

    # suppose all instances are not crowd
    iscrowd = torch.zeros((num_objs,), dtype=torch.int64)

    target = {}
    target["boxes"] = boxes
    target["labels"] = labels
    target["image_id"] = image_id
    target["area"] = area
    target["iscrowd"] = iscrowd

    if self.transforms is not None:
        img, target = self.transforms(img, target)

    return img, target

```

```
def __len__(self):  
    return len(self.imgs)  
  
def get_transform(train):  
    transforms = []  
    transforms.append(T.ToTensor())  
    if train:  
        transforms.append(T.RandomHorizontalFlip(0.5))  
    return T.Compose(transforms)
```

Overwriting scripts/XMLDataset.py

In [10]:

```

%%writefile scripts/maskrcnn_model.py
import torchvision
from torchvision.models.detection.faster_rcnn import FastRCNNPredictor
from torchvision.models.detection.rpn import AnchorGenerator
from torchvision.models.detection.rpn import RPNHead

def get_model(
    num_classes,
    anchor_sizes,
    anchor_aspect_ratios,
    rpn_nms_threshold,
    box_nms_threshold,
    box_score_threshold,
    num_box_detections,
):

    # load pre-trained mask R-CNN model
    model = torchvision.models.detection.maskrcnn_resnet50_fpn(
        pretrained=True,
        rpn_nms_thresh=rpn_nms_threshold,
        box_nms_thresh=box_nms_threshold,
        box_score_thresh=box_score_threshold,
        box_detections_per_img=num_box_detections,
    )
    # get number of input features for the classifier
    in_features = model.roi_heads.box_predictor.cls_score.in_features

    # replace the pre-trained head with a new one
    model.roi_heads.box_predictor = FastRCNNPredictor(in_features, num_classes)

    anchor_sizes = tuple([float(i) for i in anchor_sizes.split(",")])
    anchor_aspect_ratios = tuple([float(i) for i in anchor_aspect_ratios.split(
",")])

    # create an anchor_generator for the FPN which by default has 5 outputs
    anchor_generator = AnchorGenerator(
        sizes=tuple([anchor_sizes for _ in range(5)]),
        aspect_ratios=tuple([anchor_aspect_ratios for _ in range(5)]),
    )
    model.rpn.anchor_generator = anchor_generator

    # get number of input features for the RPN returned by FPN (256)
    in_channels = model.backbone.out_channels

    # replace the RPN head
    model.rpn.head = RPNHead(
        in_channels, anchor_generator.num_anchors_per_location()[0]
    )

    # turn off masks since dataset only has bounding boxes
    model.roi_heads.mask_roi_pool = None

    return model

```

Overwriting scripts/maskrcnn_model.py

In [11]:

```

%%writefile scripts/train.py
import os
import sys

sys.path.append("./cocoapi/PythonAPI/")

import torch
import argparse
import utils
from XMLDataset import BuildDataset, get_transform
from maskrcnn_model import get_model
from engine import train_one_epoch, evaluate

if __name__ == "__main__":
    parser = argparse.ArgumentParser(description="PyTorch Object Detection Training")
    parser.add_argument(
        "--data_path", default="./Data/", help="the path to the dataset"
    )
    parser.add_argument("--batch_size", default=2, type=int)
    parser.add_argument(
        "--epochs", default=10, type=int, help="number of total epochs to run"
    )
    parser.add_argument(
        "--workers", default=4, type=int, help="number of data loading workers"
    )
    parser.add_argument(
        "--learning_rate", default=0.005, type=float, help="initial learning rate"
    )
    parser.add_argument("--momentum", default=0.9, type=float, help="momentum")
    parser.add_argument(
        "--weight_decay",
        default=0.0005,
        type=float,
        help="weight decay (default: 1e-4)",
    )
    parser.add_argument(
        "--lr_step_size", default=3, type=int, help="decrease lr every step-size epochs"
    )
    parser.add_argument(
        "--lr_gamma",
        default=0.1,
        type=float,
        help="decrease lr by a factor of lr-gamma",
    )
    parser.add_argument("--print_freq", default=10, type=int, help="print frequency")
    parser.add_argument("--output_dir", default="outputs", help="path where to save")
    parser.add_argument("--anchor_sizes", default="16", type=str, help="anchor sizes")
    parser.add_argument(
        "--anchor_aspect_ratios", default="1.0", type=str, help="anchor aspect ratios"
    )
    parser.add_argument(
        "--rpn_nms_thresh",

```

```

        default=0.7,
        type=float,
        help="NMS threshold used for postprocessing the RPN proposals",
    )
    parser.add_argument(
        "--box_nms_thresh",
        default=0.5,
        type=float,
        help="NMS threshold for the prediction head. Used during inference",
    )
    parser.add_argument(
        "--box_score_thresh",
        default=0.05,
        type=float,
        help="during inference only return proposals"
        "with a classification score greater than box_score_thresh",
    )
    parser.add_argument(
        "--box_detections_per_img",
        default=100,
        type=int,
        help="maximum number of detections per image, for all classes",
    )
    parser.add_argument(
        "--num_classes",
        default=4,
        type=int,
        help="number of classes + 1",
    )
    parser.add_argument(
        "--dataset",
        default="Fruit",
        type=str,
        help="Path to dataset",
    )
    args = parser.parse_args()

```

```
data_path = args.data_path
```

```
# use our dataset and defined transformations
```

```
dataset = BuildDataset(data_path, args.dataset, get_transform(train=True), train=True)
```

```
dataset_test = BuildDataset(data_path, args.dataset, get_transform(train=False), train=False)
```

```
# dataset_test = BuildDataset(data_path, get_transform(train=False), train=True)
```

```
# split the dataset in train and test set
```

```
# indices = torch.randperm(len(dataset)).tolist()
```

```
# dataset = torch.utils.data.Subset(dataset, range(0, len(dataset)))
```

```
# dataset_test = torch.utils.data.Subset(dataset_test, range(0, len(dataset_test)))
```

```
# dataset = torch.utils.data.Subset(dataset, indices[:-100])
```

```
# dataset_test = torch.utils.data.Subset(dataset_test, indices[-100:])
```

```
batch_size = args.batch_size
```

```
workers = args.workers
```

```
# define training and validation data loaders
```

```
data_loader = torch.utils.data.DataLoader(
    dataset,
    batch_size=2,
```

```
        shuffle=True,
        num_workers=workers,
        collate_fn=utils.collate_fn,
    )

data_loader_test = torch.utils.data.DataLoader(
    dataset_test,
    batch_size=2,
    shuffle=False,
    num_workers=workers,
    collate_fn=utils.collate_fn,
)

# our dataset has two classes only - background and out of stock
num_classes = args.num_classes

model = get_model(
    num_classes,
    args.anchor_sizes,
    args.anchor_aspect_ratios,
    args.rpn_nms_thresh,
    args.box_nms_thresh,
    args.box_score_thresh,
    args.box_detections_per_img,
)

# train on the GPU or on the CPU, if a GPU is not available
device = torch.device("cuda") if torch.cuda.is_available() else torch.device("cpu")

# move model to the right device
model.to(device)

learning_rate = args.learning_rate
momentum = args.momentum
weight_decay = args.weight_decay

# construct an optimizer
params = [p for p in model.parameters() if p.requires_grad]
optimizer = torch.optim.SGD(
    params, lr=learning_rate, momentum=momentum, weight_decay=weight_decay
)

lr_step_size = args.lr_step_size
lr_gamma = args.lr_gamma

# and a learning rate scheduler
lr_scheduler = torch.optim.lr_scheduler.StepLR(
    optimizer, step_size=lr_step_size, gamma=lr_gamma
)

# number of training epochs
num_epochs = args.epochs
print_freq = args.print_freq

for epoch in range(num_epochs):
    # train for one epoch, printing every 10 iterations
```

```
train_one_epoch(model, optimizer, data_loader, device, epoch, print_freq=print_freq)

# update the learning rate
lr_scheduler.step()
# evaluate on the test dataset after every epoch
#print("EVALUATE!!!!!!!!!!!!!!!!!!!!!!!!!!!!")
evaluate(model, data_loader_test, device=device)
evaluate(model, data_loader, device=device)

#

# save model
if not os.path.exists(args.output_dir):
    os.makedirs(args.output_dir)
torch.save(model.state_dict(), os.path.join(args.output_dir, args.dataset+"model_
_latest.pth"))

print("That's it!")
```

Overwriting scripts/train.py

Trenowanie modelu

In [19]:

```
import sys

sys.path.append("scripts")
sys.path.append("scripts/cocoapi/PythonAPI/")

import azureml.core
from azureml.core import Workspace, Experiment
from azureml.widgets import RunDetails
from azureml.train.dnn import PyTorch

from dotenv import set_key, get_key, find_dotenv
from utilities import get_auth, download_data

import torch
from scripts.XMLDataset import BuildDataset, get_transform
from scripts.maskrcnn_model import get_model

from PIL import Image, ImageDraw
from IPython.display import display

# check core SDK version number
print("Azure ML SDK Version: ", azureml.core.VERSION)
```

Azure ML SDK Version: 1.17.0

In [20]:

```
env_path = find_dotenv(raise_error_if_not_found=True)
```

In [21]:

```
# data_file = "Data.zip"
# data_url = ("https://bostondata.blob.core.windows.net/builddata/{}".format(data_file))
# download_data(data_file, data_url)
```

In [22]:

```
ws = Workspace.from_config(auth=get_auth(env_path))
print(ws.name, ws.resource_group, ws.location, sep="\n")
```

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eastus

In [23]:

```
exp = Experiment(workspace=ws, name='torchvision')
```

In [17]:

```
# with open("scripts/train.py", "r") as f:
#     print(f.read())
```

In [18]:

```
num_epochs = 2
script_params = {
    "--data_path": ".",
    "--workers": 8,
    "--learning_rate": 0.005,
    "--epochs": num_epochs,
    "--anchor_sizes": "16,32,64,128,256,512",
    "--anchor_aspect_ratios": "0.25,0.5,1.0,2.0",
    "--rpn_nms_thresh": 0.5,
    "--box_nms_thresh": 0.3,
    "--box_score_thresh": 0.10,
    "--num_classes": 4,
    "--dataset": "Fruit",
}

estimator = PyTorch(
    source_directory="./scripts",
    script_params=script_params,
    compute_target="local",
    entry_script="train.py",
    use_docker=False,
    user_managed=True,
    use_gpu=True,
)
```

WARNING - 'use_docker' parameter will be deprecated. Please use 'environment_definition' instead.

In [19]:

```
def prepareEstimator (dataset,clas,num_epochs,outPut_fileName):
    script_params = {
        "--data_path": ".",
        "--workers": 8,
        "--learning_rate": 0.005,
        "--epochs": num_epochs,
        "--anchor_sizes": "16,32,64,128,256,512",
        "--anchor_aspect_ratios": "0.25,0.5,1.0,2.0",
        "--rpn_nms_thresh": 0.5,
        "--box_nms_thresh": 0.3,
        "--box_score_thresh": 0.10,
        "--num_classes": clas,
        "--dataset": dataset,
    }

    estimator = PyTorch(
        source_directory="./scripts",
        script_params=script_params,
        compute_target="local",
        entry_script="train.py",
        use_docker=False,
        user_managed=True,
        use_gpu=True,
    )
    estimator.run_config.environment.python.interpreter_path = ("/anaconda/envs/
azureml_py36_pytorch/bin/python")
    estimator.run_config.history.snapshot_project = False
    run = exp.submit(estimator)
    RunDetails(run).show()
    run.wait_for_completion(show_output=True)
    metrics = run.get_metrics()
    run.get_file_names()
    run.register_model(model_name="torchvision_local_model", model_path="/output
s/"+outPut_fileName+"model_latest.pth")
    run.download_file("outputs/"+outPut_fileName+"model_latest.pth")
    return metrics
```

In [20]:

```
# estimator.run_config.environment.python.interpreter_path = ("/anaconda/envs/az
ureml_py36_pytorch/bin/python")
# estimator.run_config.history.snapshot_project = False
```

In [21]:

```
# run = exp.submit(estimator)
# RunDetails(run).show()
```

In [22]:

```
#run.wait_for_completion(show_output=True)
```

In [23]:

```
#run.get_file_names()
```

In [24]:

```
#run.get_metrics()
```

In [25]:

```
#run.register_model(model_name="torchvision_local_model", model_path="/outputs/m  
odel_latest.pth")
```

In [26]:

```
#run.download_file("outputs/model_latest.pth")
```

Ładowanie datasetów

DataSet Fruit

Arguments

```
--data_path . --workers 8 --learning_rate 0.005 --epochs 20 --anchor_size  
s 16,32,64,128,256,512 --anchor_aspect_ratios 0.25,0.5,1.0,2.0 --rpn_nms_  
thresh 0.5 --box_nms_thresh 0.3 --box_score_thresh 0.1 --num_classes 4 --  
dataset Fruit
```

Czas trwania: 1h 54m 18.30s

DataSet MonkeyCats

Arguments

```
--data_path . --workers 8 --learning_rate 0.005 --epochs 20 --anchor_size  
s 16,32,64,128,256,512 --anchor_aspect_ratios 0.25,0.5,1.0,2.0 --rpn_nms_  
thresh 0.5 --box_nms_thresh 0.3 --box_score_thresh 0.1 --num_classes 4 --  
dataset monkeyCats
```

Czas trwania: 3h 47m 4.478s

DataSet PlayCards

Arguments

```
--data_path . --workers 8 --learning_rate 0.005 --epochs 20 --anchor_size  
s 16,32,64,128,256,512 --anchor_aspect_ratios 0.25,0.5,1.0,2.0 --rpn_nms_  
thresh 0.5 --box_nms_thresh 0.3 --box_score_thresh 0.1 --num_classes 7 --  
dataset PlayCards
```

Czas trwania: 2h 23m 4.841s

Poniżej pokazuje metryki wszystkich na jednym wykresie:

93 - Fruit 94 - MonkeyCats 95 - PlayCards

In [27]:

```
datasetsList = ["Fruit", "monkeyCats", "PlayCards"]
classesList = [4,4,7]
num_epochs=20
metrics = []
for dataset, clas in zip(datasetsList, classesList):
    metrics.append(prepareEstimator (dataset, clas, num_epochs, dataset))
```


WARNING - 'use_docker' parameter will be deprecated. Please use 'environment_definition' instead.

WARNING - If 'script' has been provided here and a script file name has been specified in 'run_config', 'script' provided in ScriptRunConfig initialization will take precedence.

WARNING - If 'arguments' has been provided here and arguments have been specified in 'run_config', 'arguments' provided in ScriptRunConfig initialization will take precedence.

RunId: torchvision_1609779936_78a787cd

Web View: https://ml.azure.com/experiments/torchvision/runs/torchvision_1609779936_78a787cd?wsid=/subscriptions/1db0a5ce-7de1-4082-8e25-3c5a4e5a9a98/resourcegroups/ProjektAzure/workspaces/ProjektAzure

Streaming azureml-logs/70_driver_log.txt

=====

```
[2021-01-04T17:05:44.152496] Entering context manager injector.
[context_manager_injector.py] Command line Options: Namespace(inject=[
'ProjectPythonPath:context_managers.ProjectPythonPath', 'RunHistory:context_managers.RunHistory', 'TrackUserError:context_managers.TrackUserError'], invocation=['train.py', '--data_path', '.', '--workers', '8', '--learning_rate', '0.005', '--epochs', '20', '--anchor_sizes', '16,32,64,128,256,512', '--anchor_aspect_ratios', '0.25,0.5,1.0,2.0', '--rpn_nms_thresh', '0.5', '--box_nms_thresh', '0.3', '--box_score_thresh', '0.1', '--num_classes', '4', '--dataset', 'Fruit'])
Script type = None
```

Starting the daemon thread to refresh tokens in background for process with pid = 35914

Entering Run History Context Manager.

```
[2021-01-04T17:05:50.453014] Current directory: /tmp/azureml_runs/torchvision_1609779936_78a787cd
```

```
[2021-01-04T17:05:50.453086] Preparing to call script [train.py] with arguments:['--data_path', '.', '--workers', '8', '--learning_rate', '0.005', '--epochs', '20', '--anchor_sizes', '16,32,64,128,256,512', '--anchor_aspect_ratios', '0.25,0.5,1.0,2.0', '--rpn_nms_thresh', '0.5', '--box_nms_thresh', '0.3', '--box_score_thresh', '0.1', '--num_classes', '4', '--dataset', 'Fruit']
```

```
[2021-01-04T17:05:50.453111] After variable expansion, calling script [train.py] with arguments:['--data_path', '.', '--workers', '8', '--learning_rate', '0.005', '--epochs', '20', '--anchor_sizes', '16,32,64,128,256,512', '--anchor_aspect_ratios', '0.25,0.5,1.0,2.0', '--rpn_nms_thresh', '0.5', '--box_nms_thresh', '0.3', '--box_score_thresh', '0.1', '--num_classes', '4', '--dataset', 'Fruit']
```

Data/Fruit/JPEGImages

Data/Fruit/JPEGImages

<class 'str'>

```
Epoch: [0] [ 0/120] eta: 0:04:47 lr: 0.000047 loss: 2.1668 (2.1668) loss_classifier: 1.2174 (1.2174) loss_box_reg: 0.1123 (0.1123) loss_objectness: 0.6795 (0.6795) loss_rpn_box_reg: 0.1577 (0.1577) time: 2.3959 data: 0.2374 max mem: 2349
```

```
Epoch: [0] [ 10/120] eta: 0:03:12 lr: 0.000467 loss: 1.4280 (1.5864) loss_classifier: 0.5485 (0.6791) loss_box_reg: 0.0790 (0.0727) loss_objectness: 0.6759 (0.6745) loss_rpn_box_reg: 0.1743 (0.1601) time: 1.7491 data: 0.0326 max mem: 2913
```

```
Epoch: [0] [ 20/120] eta: 0:02:56 lr: 0.000886 loss: 1.0630 (1.3334) loss_classifier: 0.1131 (0.4103) loss_box_reg: 0.0612 (0.0839) loss_objectness: 0.6653 (0.6533) loss_rpn_box_reg: 0.1869 (0.1858) time: 1.7296 data: 0.0080 max mem: 3963
```

```
Epoch: [0] [ 30/120] eta: 0:02:39 lr: 0.001306 loss: 0.9446 (1.2065) loss_classifier: 0.0993 (0.3148) loss_box_reg: 0.0853 (0.0881) loss_objectness: 0.5751 (0.6152) loss_rpn_box_reg: 0.1733 (0.1885) time: 1.7907 data: 0.0062 max mem: 3963
```

```
Epoch: [0] [ 40/120] eta: 0:02:21 lr: 0.001726 loss: 0.8772 (1.1220) loss_classifier: 0.0923 (0.2597) loss_box_reg: 0.0867 (0.0912) loss_objectness: 0.4951 (0.5735) loss_rpn_box_reg: 0.1879 (0.1976) time: 1.7819 data: 0.0081 max mem: 3963
```

```
Epoch: [0] [ 50/120] eta: 0:02:02 lr: 0.002146 loss: 0.7974 (1.
```

0553) loss_classifier: 0.0699 (0.2222) loss_box_reg: 0.0778 (0.0906) loss_objectness: 0.4170 (0.5419) loss_rpn_box_reg: 0.1906 (0.2006) time: 1.7278 data: 0.0070 max mem: 3963
 Epoch: [0] [60/120] eta: 0:01:45 lr: 0.002565 loss: 0.8474 (1.0312) loss_classifier: 0.0673 (0.1982) loss_box_reg: 0.0778 (0.0915) loss_objectness: 0.4188 (0.5305) loss_rpn_box_reg: 0.2309 (0.2111) time: 1.7214 data: 0.0066 max mem: 3963

/anaconda/envs/azureml_py36_pytorch/lib/python3.6/site-packages/PIL/Image.py:989: UserWarning: Palette images with Transparency expressed in bytes should be converted to RGBA images

"Palette images with Transparency expressed in bytes should be "

Epoch: [0] [70/120] eta: 0:01:28 lr: 0.002985 loss: 0.8367 (1.0046) loss_classifier: 0.0614 (0.1806) loss_box_reg: 0.0817 (0.0934) loss_objectness: 0.4826 (0.5246) loss_rpn_box_reg: 0.2051 (0.2059) time: 1.7675 data: 0.0067 max mem: 3971

Epoch: [0] [80/120] eta: 0:01:09 lr: 0.003405 loss: 0.7589 (0.9721) loss_classifier: 0.0556 (0.1645) loss_box_reg: 0.0699 (0.0899) loss_objectness: 0.4470 (0.5135) loss_rpn_box_reg: 0.1546 (0.2042) time: 1.7266 data: 0.0068 max mem: 3971

/anaconda/envs/azureml_py36_pytorch/lib/python3.6/site-packages/PIL/Image.py:989: UserWarning: Palette images with Transparency expressed in bytes should be converted to RGBA images

"Palette images with Transparency expressed in bytes should be "

Epoch: [0] [90/120] eta: 0:00:52 lr: 0.003825 loss: 0.7108 (0.9455) loss_classifier: 0.0534 (0.1544) loss_box_reg: 0.0677 (0.0915) loss_objectness: 0.3711 (0.4969) loss_rpn_box_reg: 0.1599 (0.2028) time: 1.7162 data: 0.0073 max mem: 3971

Epoch: [0] [100/120] eta: 0:00:35 lr: 0.004244 loss: 0.7080 (0.9209) loss_classifier: 0.0613 (0.1466) loss_box_reg: 0.1005 (0.0930) loss_objectness: 0.3387 (0.4745) loss_rpn_box_reg: 0.2138 (0.2068) time: 1.8031 data: 0.0082 max mem: 3971

Epoch: [0] [110/120] eta: 0:00:17 lr: 0.004664 loss: 0.6939 (0.9000) loss_classifier: 0.0563 (0.1382) loss_box_reg: 0.0884 (0.0922) loss_objectness: 0.2538 (0.4579) loss_rpn_box_reg: 0.2220 (0.2117) time: 1.8078 data: 0.0085 max mem: 3971

Epoch: [0] [119/120] eta: 0:00:01 lr: 0.005000 loss: 0.6751 (0.8818) loss_classifier: 0.0513 (0.1333) loss_box_reg: 0.0753 (0.0932) loss_objectness: 0.2501 (0.4418) loss_rpn_box_reg: 0.1914 (0.2135) time: 1.7590 data: 0.0077 max mem: 3971

Epoch: [0] Total time: 0:03:31 (1.7605 s / it)

creating index...

index created!

<string>:6: DeprecationWarning: object of type <class 'numpy.float64'> cannot be safely interpreted as an integer.

Test: [0/30] eta: 0:00:27 model_time: 0.6965 (0.6965) evaluator_time: 0.0037 (0.0037) time: 0.9021 data: 0.1999 max mem: 3971

Test: [29/30] eta: 0:00:00 model_time: 0.7124 (0.7307) evaluator_time: 0.0024 (0.0025) time: 0.7588 data: 0.0059 max mem: 3971

Test: Total time: 0:00:22 (0.7515 s / it)

Averaged stats: model_time: 0.7124 (0.7307) evaluator_time: 0.0024 (0.0025)

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.320

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.633

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.282

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=1

```

00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.578
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.321
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.274
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.417
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.417
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.613
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.414
/anaconda/envs/azureml_py36_pytorch/lib/python3.6/site-packages/PI
L/Image.py:989: UserWarning: Palette images with Transparency expre
ssed in bytes should be converted to RGBA images
"Palette images with Transparency expressed in bytes should be "
creating index...
index created!
Test: [ 0/120] eta: 0:01:56 model_time: 0.7545 (0.7545) evalua
tor_time: 0.0028 (0.0028) time: 0.9698 data: 0.2088 max mem: 397
1
Test: [100/120] eta: 0:00:15 model_time: 0.7668 (0.7579) evalua
tor_time: 0.0025 (0.0025) time: 0.7799 data: 0.0067 max mem: 397
1
Test: [119/120] eta: 0:00:00 model_time: 0.7638 (0.7567) evalua
tor_time: 0.0021 (0.0025) time: 0.7654 data: 0.0066 max mem: 397
1
Test: Total time: 0:01:32 (0.7721 s / it)
Averaged stats: model_time: 0.7638 (0.7567) evaluator_time: 0.0021
(0.0025)
Accumulating evaluation results...
DONE (t=0.05s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.196
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.470
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.130
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.155
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.202
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.218
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.318
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.319
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.192
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1

```

```
00 ] = 0.327
Epoch: [1] [ 0/120] eta: 0:03:47 lr: 0.005000 loss: 0.6231 (0.6231) loss_classifier: 0.0486 (0.0486) loss_box_reg: 0.1583 (0.1583) loss_objectness: 0.1669 (0.1669) loss_rpn_box_reg: 0.2493 (0.2493) time: 1.8934 data: 0.3121 max mem: 3971
Epoch: [1] [ 10/120] eta: 0:03:03 lr: 0.005000 loss: 0.5193 (0.4941) loss_classifier: 0.0486 (0.0499) loss_box_reg: 0.0699 (0.0905) loss_objectness: 0.1339 (0.1611) loss_rpn_box_reg: 0.1859 (0.1925) time: 1.6681 data: 0.0334 max mem: 3971
Epoch: [1] [ 20/120] eta: 0:02:52 lr: 0.005000 loss: 0.4778 (0.4999) loss_classifier: 0.0424 (0.0472) loss_box_reg: 0.0602 (0.0722) loss_objectness: 0.1262 (0.1491) loss_rpn_box_reg: 0.1859 (0.2314) time: 1.7209 data: 0.0056 max mem: 3971
Epoch: [1] [ 30/120] eta: 0:02:35 lr: 0.005000 loss: 0.5079 (0.5204) loss_classifier: 0.0444 (0.0502) loss_box_reg: 0.0534 (0.0690) loss_objectness: 0.1411 (0.1622) loss_rpn_box_reg: 0.2383 (0.2389) time: 1.7614 data: 0.0069 max mem: 3971
Epoch: [1] [ 40/120] eta: 0:02:17 lr: 0.005000 loss: 0.5072 (0.4993) loss_classifier: 0.0426 (0.0488) loss_box_reg: 0.0555 (0.0709) loss_objectness: 0.1578 (0.1603) loss_rpn_box_reg: 0.2021 (0.2194) time: 1.7073 data: 0.0077 max mem: 3971
Epoch: [1] [ 50/120] eta: 0:02:01 lr: 0.005000 loss: 0.4943 (0.5099) loss_classifier: 0.0519 (0.0560) loss_box_reg: 0.0722 (0.0777) loss_objectness: 0.1540 (0.1627) loss_rpn_box_reg: 0.1577 (0.2135) time: 1.7438 data: 0.0072 max mem: 3971
Epoch: [1] [ 60/120] eta: 0:01:44 lr: 0.005000 loss: 0.7589 (0.5722) loss_classifier: 0.0687 (0.0605) loss_box_reg: 0.0944 (0.0825) loss_objectness: 0.2046 (0.1914) loss_rpn_box_reg: 0.2475 (0.2378) time: 1.7938 data: 0.0075 max mem: 3971
Epoch: [1] [ 70/120] eta: 0:01:26 lr: 0.005000 loss: 0.8201 (0.5937) loss_classifier: 0.0728 (0.0619) loss_box_reg: 0.0853 (0.0814) loss_objectness: 0.3435 (0.2106) loss_rpn_box_reg: 0.2752 (0.2398) time: 1.7440 data: 0.0080 max mem: 3971
Epoch: [1] [ 80/120] eta: 0:01:09 lr: 0.005000 loss: 0.7266 (0.6076) loss_classifier: 0.0771 (0.0666) loss_box_reg: 0.0714 (0.0832) loss_objectness: 0.3376 (0.2243) loss_rpn_box_reg: 0.2077 (0.2335) time: 1.7357 data: 0.0076 max mem: 3971
Epoch: [1] [ 90/120] eta: 0:00:52 lr: 0.005000 loss: 0.6791 (0.6059) loss_classifier: 0.0870 (0.0677) loss_box_reg: 0.0856 (0.0827) loss_objectness: 0.2557 (0.2280) loss_rpn_box_reg: 0.2071 (0.2275) time: 1.7234 data: 0.0071 max mem: 3971
Epoch: [1] [100/120] eta: 0:00:34 lr: 0.005000 loss: 0.5705 (0.6046) loss_classifier: 0.0763 (0.0684) loss_box_reg: 0.0856 (0.0829) loss_objectness: 0.2407 (0.2273) loss_rpn_box_reg: 0.2015 (0.2259) time: 1.7128 data: 0.0071 max mem: 3971
Epoch: [1] [110/120] eta: 0:00:17 lr: 0.005000 loss: 0.5249 (0.5989) loss_classifier: 0.0752 (0.0693) loss_box_reg: 0.0660 (0.0832) loss_objectness: 0.1814 (0.2224) loss_rpn_box_reg: 0.1931 (0.2240) time: 1.7180 data: 0.0073 max mem: 3971
Epoch: [1] [119/120] eta: 0:00:01 lr: 0.005000 loss: 0.5042 (0.5918) loss_classifier: 0.0561 (0.0680) loss_box_reg: 0.0595 (0.0812) loss_objectness: 0.1733 (0.2192) loss_rpn_box_reg: 0.2095 (0.2234) time: 1.7269 data: 0.0078 max mem: 3971
Epoch: [1] Total time: 0:03:28 (1.7345 s / it)
creating index...
index created!
Test: [ 0/30] eta: 0:00:25 model_time: 0.6637 (0.6637) evaluator_time: 0.0049 (0.0049) time: 0.8394 data: 0.1688 max mem: 3971
Test: [29/30] eta: 0:00:00 model_time: 0.7154 (0.7406) evaluator_time: 0.0023 (0.0024) time: 0.7743 data: 0.0058 max mem: 3971
Test: Total time: 0:00:22 (0.7605 s / it)
```

Averaged stats: model_time: 0.7154 (0.7406) evaluator_time: 0.0023 (0.0024)

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.291

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.554

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.273

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.530

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.290

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.261

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.403

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.403

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.688

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.403

creating index...

index created!

Test: [0/120] eta: 0:02:15 model_time: 0.8450 (0.8450) evaluator_time: 0.0034 (0.0034) time: 1.1309 data: 0.2778 max mem: 3971

Test: [100/120] eta: 0:00:15 model_time: 0.7611 (0.7507) evaluator_time: 0.0020 (0.0024) time: 0.7623 data: 0.0078 max mem: 3971

Test: [119/120] eta: 0:00:00 model_time: 0.7243 (0.7450) evaluator_time: 0.0022 (0.0024) time: 0.7200 data: 0.0072 max mem: 3971

Test: Total time: 0:01:31 (0.7609 s / it)

Averaged stats: model_time: 0.7243 (0.7450) evaluator_time: 0.0022 (0.0024)

Accumulating evaluation results...

DONE (t=0.05s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.172

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.420

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.114

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.159

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.177

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.190

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=

```
10 ] = 0.305
Average Recall      (AR) @[ IoU=0.50:0.95 | area=  all | maxDets=1
00 ] = 0.306
Average Recall      (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall      (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.257
Average Recall      (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.311
Epoch: [2] [ 0/120] eta: 0:04:26 lr: 0.005000 loss: 0.6864 (0.
6864) loss_classifier: 0.0730 (0.0730) loss_box_reg: 0.0966 (0.09
66) loss_objectness: 0.2198 (0.2198) loss_rpn_box_reg: 0.2971 (0.
2971) time: 2.2192 data: 0.3104 max mem: 3971
Epoch: [2] [ 10/120] eta: 0:03:09 lr: 0.005000 loss: 0.5094 (0.
5023) loss_classifier: 0.0623 (0.0692) loss_box_reg: 0.0587 (0.06
35) loss_objectness: 0.1738 (0.1982) loss_rpn_box_reg: 0.1763 (0.
1714) time: 1.7207 data: 0.0365 max mem: 3971
Epoch: [2] [ 20/120] eta: 0:02:51 lr: 0.005000 loss: 0.5094 (0.
5053) loss_classifier: 0.0512 (0.0625) loss_box_reg: 0.0523 (0.06
46) loss_objectness: 0.1738 (0.1872) loss_rpn_box_reg: 0.1763 (0.
1909) time: 1.6948 data: 0.0069 max mem: 3971
Epoch: [2] [ 30/120] eta: 0:02:39 lr: 0.005000 loss: 0.4651 (0.
5054) loss_classifier: 0.0440 (0.0563) loss_box_reg: 0.0434 (0.06
20) loss_objectness: 0.1434 (0.1824) loss_rpn_box_reg: 0.2083 (0.
2047) time: 1.7933 data: 0.0063 max mem: 4138
Epoch: [2] [ 40/120] eta: 0:02:23 lr: 0.005000 loss: 0.4516 (0.
4982) loss_classifier: 0.0484 (0.0586) loss_box_reg: 0.0721 (0.06
69) loss_objectness: 0.1504 (0.1785) loss_rpn_box_reg: 0.1741 (0.
1942) time: 1.8801 data: 0.0075 max mem: 4158
Epoch: [2] [ 50/120] eta: 0:02:05 lr: 0.005000 loss: 0.4268 (0.
4861) loss_classifier: 0.0582 (0.0571) loss_box_reg: 0.0756 (0.06
90) loss_objectness: 0.1174 (0.1638) loss_rpn_box_reg: 0.1634 (0.
1962) time: 1.8288 data: 0.0075 max mem: 4158
Epoch: [2] [ 60/120] eta: 0:01:46 lr: 0.005000 loss: 0.4120 (0.
4779) loss_classifier: 0.0513 (0.0568) loss_box_reg: 0.0603 (0.06
91) loss_objectness: 0.1093 (0.1576) loss_rpn_box_reg: 0.1830 (0.
1944) time: 1.7432 data: 0.0074 max mem: 4158
Epoch: [2] [ 70/120] eta: 0:01:28 lr: 0.005000 loss: 0.4612 (0.
4814) loss_classifier: 0.0541 (0.0582) loss_box_reg: 0.0684 (0.07
09) loss_objectness: 0.1657 (0.1642) loss_rpn_box_reg: 0.1444 (0.
1882) time: 1.7112 data: 0.0069 max mem: 4158
Epoch: [2] [ 80/120] eta: 0:01:10 lr: 0.005000 loss: 0.4794 (0.
4864) loss_classifier: 0.0601 (0.0597) loss_box_reg: 0.0740 (0.07
34) loss_objectness: 0.1780 (0.1614) loss_rpn_box_reg: 0.1311 (0.
1919) time: 1.7434 data: 0.0072 max mem: 4158
Epoch: [2] [ 90/120] eta: 0:00:52 lr: 0.005000 loss: 0.4697 (0.
4844) loss_classifier: 0.0587 (0.0594) loss_box_reg: 0.0714 (0.07
20) loss_objectness: 0.1388 (0.1628) loss_rpn_box_reg: 0.1533 (0.
1902) time: 1.7282 data: 0.0075 max mem: 4158
Epoch: [2] [100/120] eta: 0:00:35 lr: 0.005000 loss: 0.4507 (0.
4819) loss_classifier: 0.0536 (0.0601) loss_box_reg: 0.0553 (0.07
20) loss_objectness: 0.1284 (0.1616) loss_rpn_box_reg: 0.1692 (0.
1882) time: 1.6908 data: 0.0074 max mem: 4158
Epoch: [2] [110/120] eta: 0:00:17 lr: 0.005000 loss: 0.4142 (0.
4756) loss_classifier: 0.0504 (0.0587) loss_box_reg: 0.0644 (0.07
09) loss_objectness: 0.0971 (0.1601) loss_rpn_box_reg: 0.1594 (0.
1860) time: 1.7538 data: 0.0071 max mem: 4158
Epoch: [2] [119/120] eta: 0:00:01 lr: 0.005000 loss: 0.4234 (0.
4820) loss_classifier: 0.0504 (0.0593) loss_box_reg: 0.0543 (0.07
08) loss_objectness: 0.1286 (0.1626) loss_rpn_box_reg: 0.1605 (0.
1892) time: 1.8311 data: 0.0076 max mem: 4655
```

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Epoch: [2] Total time: 0:03:32 (1.7708 s / it)
creating index...
index created!
Test: [ 0/30] eta: 0:00:25 model_time: 0.6674 (0.6674) evaluator_time: 0.0048 (0.0048) time: 0.8442 data: 0.1698 max mem: 4655
Test: [29/30] eta: 0:00:00 model_time: 0.7038 (0.7336) evaluator_time: 0.0021 (0.0024) time: 0.7634 data: 0.0064 max mem: 4655
Test: Total time: 0:00:22 (0.7539 s / it)
Averaged stats: model_time: 0.7038 (0.7336) evaluator_time: 0.0021 (0.0024)
Accumulating evaluation results...
DONE (t=0.02s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.440
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.734
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.483
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.655
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.443
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.353
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.505
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.505
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.688
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.505
creating index...
index created!
Test: [ 0/120] eta: 0:01:39 model_time: 0.5951 (0.5951) evaluator_time: 0.0031 (0.0031) time: 0.8262 data: 0.2248 max mem: 4655
Test: [100/120] eta: 0:00:15 model_time: 0.7505 (0.7525) evaluator_time: 0.0020 (0.0023) time: 0.7822 data: 0.0074 max mem: 4655
Test: [119/120] eta: 0:00:00 model_time: 0.7517 (0.7534) evaluator_time: 0.0020 (0.0023) time: 0.7725 data: 0.0068 max mem: 4655
Test: Total time: 0:01:32 (0.7688 s / it)
Averaged stats: model_time: 0.7517 (0.7534) evaluator_time: 0.0020 (0.0023)
Accumulating evaluation results...
DONE (t=0.04s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.247
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.510
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.218
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1

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00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.050
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.257
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.268
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.376
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.378
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.059
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.390
Epoch: [3] [ 0/120] eta: 0:04:11 lr: 0.000500 loss: 0.3968 (0.
3968) loss_classifier: 0.0459 (0.0459) loss_box_reg: 0.0463 (0.04
63) loss_objectness: 0.1684 (0.1684) loss_rpn_box_reg: 0.1362 (0.
1362) time: 2.0958 data: 0.1799 max mem: 4655
Epoch: [3] [ 10/120] eta: 0:03:19 lr: 0.000500 loss: 0.3968 (0.
4318) loss_classifier: 0.0520 (0.0590) loss_box_reg: 0.0681 (0.06
56) loss_objectness: 0.1423 (0.1418) loss_rpn_box_reg: 0.1508 (0.
1654) time: 1.8165 data: 0.0249 max mem: 4655
Epoch: [3] [ 20/120] eta: 0:03:05 lr: 0.000500 loss: 0.3854 (0.
4229) loss_classifier: 0.0454 (0.0535) loss_box_reg: 0.0699 (0.06
92) loss_objectness: 0.1283 (0.1337) loss_rpn_box_reg: 0.1508 (0.
1665) time: 1.8428 data: 0.0075 max mem: 4655
Epoch: [3] [ 30/120] eta: 0:02:42 lr: 0.000500 loss: 0.3125 (0.
3882) loss_classifier: 0.0429 (0.0490) loss_box_reg: 0.0445 (0.06
17) loss_objectness: 0.1069 (0.1263) loss_rpn_box_reg: 0.1069 (0.
1513) time: 1.8000 data: 0.0067 max mem: 4655
Epoch: [3] [ 40/120] eta: 0:02:22 lr: 0.000500 loss: 0.3040 (0.
3768) loss_classifier: 0.0367 (0.0483) loss_box_reg: 0.0430 (0.06
31) loss_objectness: 0.0964 (0.1247) loss_rpn_box_reg: 0.0934 (0.
1407) time: 1.7139 data: 0.0073 max mem: 4655
Epoch: [3] [ 50/120] eta: 0:02:08 lr: 0.000500 loss: 0.3092 (0.
3730) loss_classifier: 0.0427 (0.0493) loss_box_reg: 0.0520 (0.06
44) loss_objectness: 0.0964 (0.1221) loss_rpn_box_reg: 0.0989 (0.
1372) time: 1.8684 data: 0.0071 max mem: 4655
Epoch: [3] [ 60/120] eta: 0:01:48 lr: 0.000500 loss: 0.2868 (0.
3614) loss_classifier: 0.0331 (0.0466) loss_box_reg: 0.0487 (0.06
24) loss_objectness: 0.0932 (0.1180) loss_rpn_box_reg: 0.1243 (0.
1344) time: 1.8560 data: 0.0071 max mem: 4655
Epoch: [3] [ 70/120] eta: 0:01:30 lr: 0.000500 loss: 0.3147 (0.
3647) loss_classifier: 0.0284 (0.0479) loss_box_reg: 0.0487 (0.06
36) loss_objectness: 0.0935 (0.1187) loss_rpn_box_reg: 0.1266 (0.
1345) time: 1.7799 data: 0.0067 max mem: 4655
Epoch: [3] [ 80/120] eta: 0:01:12 lr: 0.000500 loss: 0.3161 (0.
3550) loss_classifier: 0.0323 (0.0471) loss_box_reg: 0.0638 (0.06
31) loss_objectness: 0.0669 (0.1125) loss_rpn_box_reg: 0.1130 (0.
1323) time: 1.8245 data: 0.0072 max mem: 4655
Epoch: [3] [ 90/120] eta: 0:00:54 lr: 0.000500 loss: 0.2787 (0.
3470) loss_classifier: 0.0376 (0.0466) loss_box_reg: 0.0533 (0.06
20) loss_objectness: 0.0670 (0.1095) loss_rpn_box_reg: 0.0902 (0.
1290) time: 1.7752 data: 0.0075 max mem: 4655
Epoch: [3] [100/120] eta: 0:00:36 lr: 0.000500 loss: 0.2793 (0.
3423) loss_classifier: 0.0395 (0.0462) loss_box_reg: 0.0509 (0.06
21) loss_objectness: 0.0778 (0.1092) loss_rpn_box_reg: 0.0833 (0.
1248) time: 1.7788 data: 0.0079 max mem: 4655
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Epoch: [3] [110/120] eta: 0:00:17 lr: 0.000500 loss: 0.3366 (0.3453) loss_classifier: 0.0395 (0.0460) loss_box_reg: 0.0513 (0.0621) loss_objectness: 0.0956 (0.1096) loss_rpn_box_reg: 0.0856 (0.1276) time: 1.7601 data: 0.0079 max mem: 4655
Epoch: [3] [119/120] eta: 0:00:01 lr: 0.000500 loss: 0.3431 (0.3429) loss_classifier: 0.0323 (0.0450) loss_box_reg: 0.0406 (0.0609) loss_objectness: 0.0927 (0.1087) loss_rpn_box_reg: 0.1366 (0.1282) time: 1.7189 data: 0.0078 max mem: 4655
Epoch: [3] Total time: 0:03:34 (1.7909 s / it)
creating index...
index created!
Test: [ 0/30] eta: 0:00:28 model_time: 0.6661 (0.6661) evaluator_time: 0.0035 (0.0035) time: 0.9338 data: 0.2609 max mem: 4655
Test: [29/30] eta: 0:00:00 model_time: 0.7221 (0.7396) evaluator_time: 0.0020 (0.0022) time: 0.7696 data: 0.0060 max mem: 4655
Test: Total time: 0:00:22 (0.7624 s / it)
Averaged stats: model_time: 0.7221 (0.7396) evaluator_time: 0.0020 (0.0022)
Accumulating evaluation results...
DONE (t=0.03s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.503
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.794
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.546
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.716
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.515
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.406
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.577
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.577
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.775
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.576
creating index...
index created!
Test: [ 0/120] eta: 0:02:08 model_time: 0.8345 (0.8345) evaluator_time: 0.0034 (0.0034) time: 1.0744 data: 0.2337 max mem: 4655
Test: [100/120] eta: 0:00:15 model_time: 0.7250 (0.7638) evaluator_time: 0.0019 (0.0022) time: 0.7383 data: 0.0070 max mem: 4655
Test: [119/120] eta: 0:00:00 model_time: 0.7618 (0.7633) evaluator_time: 0.0019 (0.0022) time: 0.7723 data: 0.0068 max mem: 4655
Test: Total time: 0:01:33 (0.7790 s / it)
Averaged stats: model_time: 0.7618 (0.7633) evaluator_time: 0.0019 (0.0022)
Accumulating evaluation results...
DONE (t=0.04s).

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IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.303
Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.546
Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.294
Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000
Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.084
Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.312
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.302
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.435
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.437
Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000
Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.149
Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.447

Epoch: [4] [0/120] eta: 0:03:35 lr: 0.000500 loss: 0.3935 (0.3935) loss_classifier: 0.0452 (0.0452) loss_box_reg: 0.0497 (0.0497) loss_objectness: 0.1575 (0.1575) loss_rpn_box_reg: 0.1413 (0.1413) time: 1.7935 data: 0.2187 max mem: 4655

Epoch: [4] [10/120] eta: 0:03:11 lr: 0.000500 loss: 0.2212 (0.2749) loss_classifier: 0.0263 (0.0361) loss_box_reg: 0.0343 (0.0504) loss_objectness: 0.0561 (0.0730) loss_rpn_box_reg: 0.1046 (0.1154) time: 1.7394 data: 0.0281 max mem: 4655

Epoch: [4] [20/120] eta: 0:02:50 lr: 0.000500 loss: 0.2169 (0.2637) loss_classifier: 0.0254 (0.0339) loss_box_reg: 0.0377 (0.0505) loss_objectness: 0.0570 (0.0739) loss_rpn_box_reg: 0.0884 (0.1053) time: 1.6969 data: 0.0072 max mem: 4655

Epoch: [4] [30/120] eta: 0:02:34 lr: 0.000500 loss: 0.2269 (0.2605) loss_classifier: 0.0284 (0.0325) loss_box_reg: 0.0451 (0.0495) loss_objectness: 0.0570 (0.0747) loss_rpn_box_reg: 0.0763 (0.1038) time: 1.6976 data: 0.0064 max mem: 4655

Epoch: [4] [40/120] eta: 0:02:15 lr: 0.000500 loss: 0.2553 (0.2733) loss_classifier: 0.0285 (0.0342) loss_box_reg: 0.0446 (0.0509) loss_objectness: 0.0548 (0.0797) loss_rpn_box_reg: 0.0948 (0.1085) time: 1.6941 data: 0.0073 max mem: 4655

Epoch: [4] [50/120] eta: 0:02:01 lr: 0.000500 loss: 0.2553 (0.2740) loss_classifier: 0.0326 (0.0352) loss_box_reg: 0.0414 (0.0527) loss_objectness: 0.0548 (0.0771) loss_rpn_box_reg: 0.1110 (0.1090) time: 1.7570 data: 0.0078 max mem: 4655

Epoch: [4] [60/120] eta: 0:01:46 lr: 0.000500 loss: 0.2676 (0.2916) loss_classifier: 0.0326 (0.0371) loss_box_reg: 0.0466 (0.0547) loss_objectness: 0.0640 (0.0861) loss_rpn_box_reg: 0.1120 (0.1137) time: 1.9104 data: 0.0092 max mem: 4655

Epoch: [4] [70/120] eta: 0:01:27 lr: 0.000500 loss: 0.2619 (0.2833) loss_classifier: 0.0312 (0.0363) loss_box_reg: 0.0546 (0.0543) loss_objectness: 0.0658 (0.0823) loss_rpn_box_reg: 0.1008 (0.1103) time: 1.8053 data: 0.0089 max mem: 4655

Epoch: [4] [80/120] eta: 0:01:10 lr: 0.000500 loss: 0.2410 (0.2833) loss_classifier: 0.0371 (0.0380) loss_box_reg: 0.0496 (0.0551) loss_objectness: 0.0510 (0.0808) loss_rpn_box_reg: 0.0924 (0.1093) time: 1.7220 data: 0.0083 max mem: 4655

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Epoch: [4] [ 90/120] eta: 0:00:52 lr: 0.000500 loss: 0.2841 (0.2863) loss_classifier: 0.0415 (0.0385) loss_box_reg: 0.0527 (0.0553) loss_objectness: 0.0655 (0.0833) loss_rpn_box_reg: 0.0893 (0.1093) time: 1.7604 data: 0.0079 max mem: 4655
Epoch: [4] [100/120] eta: 0:00:34 lr: 0.000500 loss: 0.2523 (0.2852) loss_classifier: 0.0368 (0.0383) loss_box_reg: 0.0572 (0.0547) loss_objectness: 0.0698 (0.0833) loss_rpn_box_reg: 0.0883 (0.1089) time: 1.7110 data: 0.0071 max mem: 4655
Epoch: [4] [110/120] eta: 0:00:17 lr: 0.000500 loss: 0.2257 (0.2816) loss_classifier: 0.0246 (0.0376) loss_box_reg: 0.0370 (0.0547) loss_objectness: 0.0615 (0.0816) loss_rpn_box_reg: 0.0883 (0.1077) time: 1.7919 data: 0.0130 max mem: 4655
Epoch: [4] [119/120] eta: 0:00:01 lr: 0.000500 loss: 0.2460 (0.2840) loss_classifier: 0.0302 (0.0375) loss_box_reg: 0.0539 (0.0548) loss_objectness: 0.0556 (0.0823) loss_rpn_box_reg: 0.0825 (0.1094) time: 1.8098 data: 0.0133 max mem: 4655
Epoch: [4] Total time: 0:03:30 (1.7569 s / it)
creating index...
index created!
Test: [ 0/30] eta: 0:00:25 model_time: 0.6783 (0.6783) evaluator_time: 0.0043 (0.0043) time: 0.8602 data: 0.1754 max mem: 4655
Test: [29/30] eta: 0:00:00 model_time: 0.7223 (0.7386) evaluator_time: 0.0020 (0.0022) time: 0.7687 data: 0.0062 max mem: 4655
Test: Total time: 0:00:22 (0.7587 s / it)
Averaged stats: model_time: 0.7223 (0.7386) evaluator_time: 0.0020 (0.0022)
Accumulating evaluation results...
DONE (t=0.02s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.517
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.806
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.586
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.716
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.523
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.400
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.572
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.572
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.775
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.571
creating index...
index created!
Test: [ 0/120] eta: 0:02:29 model_time: 0.7647 (0.7647) evaluator_time: 0.0030 (0.0030) time: 1.2421 data: 0.4692 max mem: 4655
Test: [100/120] eta: 0:00:15 model_time: 0.7617 (0.7575) evaluator_time: 0.0018 (0.0021) time: 0.7955 data: 0.0069 max mem: 4655

```

Test: [119/120] eta: 0:00:00 model_time: 0.7628 (0.7575) evaluator_time: 0.0021 (0.0022) time: 0.7829 data: 0.0074 max mem: 4655

Test: Total time: 0:01:32 (0.7746 s / it)

Averaged stats: model_time: 0.7628 (0.7575) evaluator_time: 0.0021 (0.0022)

Accumulating evaluation results...

DONE (t=0.04s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.313

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.563

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.306

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.182

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.318

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.311

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.444

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.444

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.210

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.452

Epoch: [5] [0/120] eta: 0:03:41 lr: 0.000500 loss: 0.2658 (0.2658) loss_classifier: 0.0213 (0.0213) loss_box_reg: 0.0268 (0.0268) loss_objectness: 0.0746 (0.0746) loss_rpn_box_reg: 0.1431 (0.1431) time: 1.8482 data: 0.3066 max mem: 4655

Epoch: [5] [10/120] eta: 0:03:13 lr: 0.000500 loss: 0.2749 (0.2961) loss_classifier: 0.0318 (0.0408) loss_box_reg: 0.0572 (0.0575) loss_objectness: 0.0566 (0.0796) loss_rpn_box_reg: 0.1017 (0.1181) time: 1.7561 data: 0.0351 max mem: 4655

Epoch: [5] [20/120] eta: 0:02:55 lr: 0.000500 loss: 0.2749 (0.2984) loss_classifier: 0.0313 (0.0380) loss_box_reg: 0.0526 (0.0543) loss_objectness: 0.0501 (0.0822) loss_rpn_box_reg: 0.1086 (0.1239) time: 1.7533 data: 0.0071 max mem: 4655

Epoch: [5] [30/120] eta: 0:02:40 lr: 0.000500 loss: 0.2302 (0.2770) loss_classifier: 0.0286 (0.0371) loss_box_reg: 0.0506 (0.0532) loss_objectness: 0.0501 (0.0794) loss_rpn_box_reg: 0.0979 (0.1073) time: 1.7965 data: 0.0064 max mem: 4655

Epoch: [5] [40/120] eta: 0:02:20 lr: 0.000500 loss: 0.2484 (0.2851) loss_classifier: 0.0326 (0.0379) loss_box_reg: 0.0506 (0.0549) loss_objectness: 0.0519 (0.0767) loss_rpn_box_reg: 0.1041 (0.1155) time: 1.7674 data: 0.0071 max mem: 4655

Epoch: [5] [50/120] eta: 0:02:02 lr: 0.000500 loss: 0.2989 (0.2868) loss_classifier: 0.0321 (0.0378) loss_box_reg: 0.0458 (0.0553) loss_objectness: 0.0646 (0.0774) loss_rpn_box_reg: 0.1139 (0.1163) time: 1.6894 data: 0.0075 max mem: 4655

Epoch: [5] [60/120] eta: 0:01:44 lr: 0.000500 loss: 0.3061 (0.2869) loss_classifier: 0.0339 (0.0380) loss_box_reg: 0.0449 (0.0552) loss_objectness: 0.0665 (0.0800) loss_rpn_box_reg: 0.1073 (0.1138) time: 1.7161 data: 0.0073 max mem: 4655

Epoch: [5] [70/120] eta: 0:01:26 lr: 0.000500 loss: 0.2392 (0.2774) loss_classifier: 0.0308 (0.0360) loss_box_reg: 0.0342 (0.0528) loss_objectness: 0.0483 (0.0763) loss_rpn_box_reg: 0.0875 (0.1122) time: 1.7234 data: 0.0077 max mem: 4655
 Epoch: [5] [80/120] eta: 0:01:09 lr: 0.000500 loss: 0.2025 (0.2722) loss_classifier: 0.0234 (0.0350) loss_box_reg: 0.0295 (0.0515) loss_objectness: 0.0478 (0.0750) loss_rpn_box_reg: 0.0842 (0.1107) time: 1.7246 data: 0.0079 max mem: 4655
 Epoch: [5] [90/120] eta: 0:00:53 lr: 0.000500 loss: 0.2078 (0.2689) loss_classifier: 0.0269 (0.0353) loss_box_reg: 0.0415 (0.0531) loss_objectness: 0.0548 (0.0732) loss_rpn_box_reg: 0.0822 (0.1074) time: 1.8669 data: 0.0076 max mem: 4655
 Epoch: [5] [100/120] eta: 0:00:35 lr: 0.000500 loss: 0.2400 (0.2697) loss_classifier: 0.0311 (0.0354) loss_box_reg: 0.0385 (0.0525) loss_objectness: 0.0556 (0.0743) loss_rpn_box_reg: 0.0881 (0.1076) time: 1.9026 data: 0.0080 max mem: 4655
 Epoch: [5] [110/120] eta: 0:00:17 lr: 0.000500 loss: 0.2223 (0.2629) loss_classifier: 0.0290 (0.0346) loss_box_reg: 0.0385 (0.0513) loss_objectness: 0.0535 (0.0716) loss_rpn_box_reg: 0.0876 (0.1053) time: 1.7880 data: 0.0079 max mem: 4655
 Epoch: [5] [119/120] eta: 0:00:01 lr: 0.000500 loss: 0.2106 (0.2628) loss_classifier: 0.0278 (0.0347) loss_box_reg: 0.0457 (0.0521) loss_objectness: 0.0437 (0.0703) loss_rpn_box_reg: 0.0876 (0.1056) time: 1.7453 data: 0.0077 max mem: 4655
 Epoch: [5] Total time: 0:03:32 (1.7690 s / it)

creating index...

index created!

Test: [0/30] eta: 0:00:26 model_time: 0.6843 (0.6843) evaluator_time: 0.0042 (0.0042) time: 0.8708 data: 0.1800 max mem: 4655

Test: [29/30] eta: 0:00:00 model_time: 0.7240 (0.7428) evaluator_time: 0.0020 (0.0022) time: 0.7717 data: 0.0059 max mem: 4655

Test: Total time: 0:00:22 (0.7632 s / it)

Averaged stats: model_time: 0.7240 (0.7428) evaluator_time: 0.0020 (0.0022)

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.534

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.812

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.618

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.713

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.546

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.424

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.598

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.598

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.775

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.598

creating index...

index created!

Test: [0/120] eta: 0:02:24 model_time: 0.7762 (0.7762) evaluator_time: 0.0027 (0.0027) time: 1.2048 data: 0.4202 max mem: 4655

Test: [100/120] eta: 0:00:15 model_time: 0.7270 (0.7555) evaluator_time: 0.0021 (0.0023) time: 0.7490 data: 0.0068 max mem: 4655

Test: [119/120] eta: 0:00:00 model_time: 0.7615 (0.7511) evaluator_time: 0.0017 (0.0022) time: 0.7482 data: 0.0066 max mem: 4655

Test: Total time: 0:01:32 (0.7677 s / it)

Averaged stats: model_time: 0.7615 (0.7511) evaluator_time: 0.0017 (0.0022)

Accumulating evaluation results...

DONE (t=0.04s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.311

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.561

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.298

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.133

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.319

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.319

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.443

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.445

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.164

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.456

Epoch: [6] [0/120] eta: 0:04:28 lr: 0.000050 loss: 0.4425 (0.4425) loss_classifier: 0.0485 (0.0485) loss_box_reg: 0.0657 (0.0657) loss_objectness: 0.2363 (0.2363) loss_rpn_box_reg: 0.0920 (0.0920) time: 2.2395 data: 0.4572 max mem: 4655

Epoch: [6] [10/120] eta: 0:03:17 lr: 0.000050 loss: 0.2472 (0.2392) loss_classifier: 0.0306 (0.0299) loss_box_reg: 0.0465 (0.0466) loss_objectness: 0.0426 (0.0713) loss_rpn_box_reg: 0.0920 (0.0915) time: 1.7960 data: 0.0443 max mem: 4655

Epoch: [6] [20/120] eta: 0:02:58 lr: 0.000050 loss: 0.2131 (0.2226) loss_classifier: 0.0252 (0.0287) loss_box_reg: 0.0313 (0.0442) loss_objectness: 0.0353 (0.0613) loss_rpn_box_reg: 0.0867 (0.0884) time: 1.7622 data: 0.0048 max mem: 4655

Epoch: [6] [30/120] eta: 0:02:37 lr: 0.000050 loss: 0.2131 (0.2173) loss_classifier: 0.0229 (0.0269) loss_box_reg: 0.0270 (0.0415) loss_objectness: 0.0436 (0.0622) loss_rpn_box_reg: 0.0622 (0.0868) time: 1.7186 data: 0.0071 max mem: 4655

Epoch: [6] [40/120] eta: 0:02:20 lr: 0.000050 loss: 0.2219 (0.2336) loss_classifier: 0.0249 (0.0314) loss_box_reg: 0.0343 (0.0471) loss_objectness: 0.0522 (0.0638) loss_rpn_box_reg: 0.0882 (0.0914) time: 1.7270 data: 0.0074 max mem: 4655

Epoch: [6] [50/120] eta: 0:02:04 lr: 0.000050 loss: 0.2635 (0.2404) loss_classifier: 0.0355 (0.0335) loss_box_reg: 0.0612 (0.0520) loss_objectness: 0.0563 (0.0654) loss_rpn_box_reg: 0.0887 (0.0896) time: 1.8143 data: 0.0076 max mem: 4655

Epoch: [6] [60/120] eta: 0:01:47 lr: 0.000050 loss: 0.2577 (0.2398) loss_classifier: 0.0347 (0.0330) loss_box_reg: 0.0616 (0.0525) loss_objectness: 0.0519 (0.0631) loss_rpn_box_reg: 0.0860 (0.0912) time: 1.8420 data: 0.0076 max mem: 4655

Epoch: [6] [70/120] eta: 0:01:28 lr: 0.000050 loss: 0.2345 (0.2458) loss_classifier: 0.0311 (0.0338) loss_box_reg: 0.0427 (0.0524) loss_objectness: 0.0610 (0.0658) loss_rpn_box_reg: 0.0817 (0.0938) time: 1.7818 data: 0.0075 max mem: 4655

Epoch: [6] [80/120] eta: 0:01:10 lr: 0.000050 loss: 0.2080 (0.2397) loss_classifier: 0.0289 (0.0332) loss_box_reg: 0.0427 (0.0517) loss_objectness: 0.0465 (0.0639) loss_rpn_box_reg: 0.0662 (0.0910) time: 1.7095 data: 0.0074 max mem: 4655

Epoch: [6] [90/120] eta: 0:00:52 lr: 0.000050 loss: 0.1867 (0.2399) loss_classifier: 0.0289 (0.0333) loss_box_reg: 0.0491 (0.0519) loss_objectness: 0.0338 (0.0642) loss_rpn_box_reg: 0.0647 (0.0906) time: 1.6989 data: 0.0072 max mem: 4655

Epoch: [6] [100/120] eta: 0:00:35 lr: 0.000050 loss: 0.2153 (0.2402) loss_classifier: 0.0283 (0.0326) loss_box_reg: 0.0287 (0.0504) loss_objectness: 0.0459 (0.0639) loss_rpn_box_reg: 0.0838 (0.0933) time: 1.7731 data: 0.0084 max mem: 4655

Epoch: [6] [110/120] eta: 0:00:17 lr: 0.000050 loss: 0.2205 (0.2431) loss_classifier: 0.0227 (0.0335) loss_box_reg: 0.0287 (0.0504) loss_objectness: 0.0451 (0.0649) loss_rpn_box_reg: 0.0993 (0.0943) time: 1.7545 data: 0.0085 max mem: 4655

Epoch: [6] [119/120] eta: 0:00:01 lr: 0.000050 loss: 0.2219 (0.2446) loss_classifier: 0.0318 (0.0335) loss_box_reg: 0.0403 (0.0503) loss_objectness: 0.0451 (0.0658) loss_rpn_box_reg: 0.0822 (0.0949) time: 1.7319 data: 0.0071 max mem: 4655

Epoch: [6] Total time: 0:03:31 (1.7610 s / it)

creating index...

index created!

Test: [0/30] eta: 0:00:26 model_time: 0.6941 (0.6941) evaluator_time: 0.0047 (0.0047) time: 0.8847 data: 0.1838 max mem: 4655

Test: [29/30] eta: 0:00:00 model_time: 0.7182 (0.7416) evaluator_time: 0.0020 (0.0023) time: 0.7708 data: 0.0062 max mem: 4655

Test: Total time: 0:00:22 (0.7619 s / it)

Averaged stats: model_time: 0.7182 (0.7416) evaluator_time: 0.0020 (0.0023)

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.531

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.803

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.603

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.713

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.543

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.418

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.594

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.594
 Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000
 Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.775
 Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.594

creating index...
 index created!

Test: [0/120] eta: 0:02:05 model_time: 0.6800 (0.6800) evaluator_time: 0.0048 (0.0048) time: 1.0418 data: 0.3514 max mem: 4655

Test: [100/120] eta: 0:00:15 model_time: 0.7477 (0.7524) evaluator_time: 0.0019 (0.0021) time: 0.7528 data: 0.0069 max mem: 4655

Test: [119/120] eta: 0:00:00 model_time: 0.7552 (0.7527) evaluator_time: 0.0018 (0.0021) time: 0.7672 data: 0.0072 max mem: 4655

Test: Total time: 0:01:32 (0.7691 s / it)

Averaged stats: model_time: 0.7552 (0.7527) evaluator_time: 0.0018 (0.0021)

Accumulating evaluation results...

DONE (t=0.04s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.300

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.539

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.294

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.073

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.311

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.307

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.440

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.440

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.126

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.453

Epoch: [7] [0/120] eta: 0:04:13 lr: 0.000050 loss: 0.1875 (0.1875) loss_classifier: 0.0157 (0.0157) loss_box_reg: 0.0368 (0.0368) loss_objectness: 0.0206 (0.0206) loss_rpn_box_reg: 0.1144 (0.1144) time: 2.1159 data: 0.2766 max mem: 4655

Epoch: [7] [10/120] eta: 0:03:15 lr: 0.000050 loss: 0.2207 (0.2306) loss_classifier: 0.0371 (0.0358) loss_box_reg: 0.0492 (0.0532) loss_objectness: 0.0472 (0.0602) loss_rpn_box_reg: 0.0757 (0.0815) time: 1.7798 data: 0.0317 max mem: 4655

Epoch: [7] [20/120] eta: 0:02:55 lr: 0.000050 loss: 0.2207 (0.2283) loss_classifier: 0.0335 (0.0337) loss_box_reg: 0.0492 (0.0536) loss_objectness: 0.0610 (0.0634) loss_rpn_box_reg: 0.0724 (0.0777) time: 1.7348 data: 0.0063 max mem: 4655

Epoch: [7] [30/120] eta: 0:02:37 lr: 0.000050 loss: 0.2114 (0.2337) loss_classifier: 0.0247 (0.0342) loss_box_reg: 0.0369 (0.0543) loss_objectness: 0.0610 (0.0620) loss_rpn_box_reg: 0.0788 (0.0831) time: 1.7257 data: 0.0066 max mem: 4655

Epoch: [7] [40/120] eta: 0:02:19 lr: 0.000050 loss: 0.2142 (0.2311) loss_classifier: 0.0260 (0.0333) loss_box_reg: 0.0394 (0.0547) loss_objectness: 0.0605 (0.0625) loss_rpn_box_reg: 0.0715 (0.0806) time: 1.7434 data: 0.0080 max mem: 4655

Epoch: [7] [50/120] eta: 0:02:02 lr: 0.000050 loss: 0.2132 (0.2322) loss_classifier: 0.0278 (0.0328) loss_box_reg: 0.0447 (0.0544) loss_objectness: 0.0486 (0.0628) loss_rpn_box_reg: 0.0596 (0.0823) time: 1.7652 data: 0.0076 max mem: 4655

Epoch: [7] [60/120] eta: 0:01:44 lr: 0.000050 loss: 0.1879 (0.2262) loss_classifier: 0.0257 (0.0318) loss_box_reg: 0.0336 (0.0511) loss_objectness: 0.0480 (0.0634) loss_rpn_box_reg: 0.0624 (0.0799) time: 1.7448 data: 0.0071 max mem: 4655

Epoch: [7] [70/120] eta: 0:01:27 lr: 0.000050 loss: 0.1898 (0.2296) loss_classifier: 0.0234 (0.0320) loss_box_reg: 0.0317 (0.0501) loss_objectness: 0.0410 (0.0648) loss_rpn_box_reg: 0.0746 (0.0826) time: 1.7196 data: 0.0077 max mem: 4655

Epoch: [7] [80/120] eta: 0:01:09 lr: 0.000050 loss: 0.2246 (0.2294) loss_classifier: 0.0234 (0.0317) loss_box_reg: 0.0355 (0.0494) loss_objectness: 0.0600 (0.0647) loss_rpn_box_reg: 0.0890 (0.0835) time: 1.7452 data: 0.0079 max mem: 4655

Epoch: [7] [90/120] eta: 0:00:52 lr: 0.000050 loss: 0.2246 (0.2318) loss_classifier: 0.0323 (0.0321) loss_box_reg: 0.0382 (0.0493) loss_objectness: 0.0559 (0.0646) loss_rpn_box_reg: 0.0896 (0.0858) time: 1.7801 data: 0.0069 max mem: 4655

Epoch: [7] [100/120] eta: 0:00:35 lr: 0.000050 loss: 0.2025 (0.2315) loss_classifier: 0.0295 (0.0320) loss_box_reg: 0.0389 (0.0489) loss_objectness: 0.0461 (0.0635) loss_rpn_box_reg: 0.0896 (0.0872) time: 1.8147 data: 0.0067 max mem: 4655

Epoch: [7] [110/120] eta: 0:00:17 lr: 0.000050 loss: 0.1824 (0.2335) loss_classifier: 0.0270 (0.0325) loss_box_reg: 0.0347 (0.0491) loss_objectness: 0.0397 (0.0638) loss_rpn_box_reg: 0.0778 (0.0881) time: 1.7378 data: 0.0076 max mem: 4655

Epoch: [7] [119/120] eta: 0:00:01 lr: 0.000050 loss: 0.2327 (0.2355) loss_classifier: 0.0197 (0.0325) loss_box_reg: 0.0300 (0.0490) loss_objectness: 0.0502 (0.0648) loss_rpn_box_reg: 0.0812 (0.0893) time: 1.7398 data: 0.0083 max mem: 4655

Epoch: [7] Total time: 0:03:30 (1.7563 s / it)

creating index...

index created!

Test: [0/30] eta: 0:00:26 model_time: 0.6769 (0.6769) evaluator_time: 0.0049 (0.0049) time: 0.8904 data: 0.2065 max mem: 4655

Test: [29/30] eta: 0:00:00 model_time: 0.7216 (0.7413) evaluator_time: 0.0020 (0.0023) time: 0.7699 data: 0.0060 max mem: 4655

Test: Total time: 0:00:22 (0.7625 s / it)

Averaged stats: model_time: 0.7216 (0.7413) evaluator_time: 0.0020 (0.0023)

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.548

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.806

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.622

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

```

Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.727
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.558
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.429
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.605
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.605
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.787
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.605
creating index...
index created!
Test: [ 0/120] eta: 0:02:09 model_time: 0.7581 (0.7581) evalua
tor_time: 0.0034 (0.0034) time: 1.0803 data: 0.3131 max mem: 465
5
Test: [100/120] eta: 0:00:15 model_time: 0.7604 (0.7559) evalua
tor_time: 0.0018 (0.0023) time: 0.8018 data: 0.0081 max mem: 465
5
Test: [119/120] eta: 0:00:00 model_time: 0.7480 (0.7533) evalua
tor_time: 0.0018 (0.0022) time: 0.7542 data: 0.0065 max mem: 465
5
Test: Total time: 0:01:32 (0.7697 s / it)
Averaged stats: model_time: 0.7480 (0.7533) evaluator_time: 0.0018
(0.0022)
Accumulating evaluation results...
DONE (t=0.04s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.309
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.566
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.283
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.228
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.314
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.322
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.449
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.451
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.267
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.459
Epoch: [8] [ 0/120] eta: 0:04:06 lr: 0.000050 loss: 0.1966 (0.
1966) loss_classifier: 0.0370 (0.0370) loss_box_reg: 0.0597 (0.05
97) loss_objectness: 0.0268 (0.0268) loss_rpn_box_reg: 0.0731 (0.
0731) time: 2.0552 data: 0.2631 max mem: 4655

```

Epoch: [8] [10/120] eta: 0:03:12 lr: 0.000050 loss: 0.1798 (0.1868) loss_classifier: 0.0294 (0.0273) loss_box_reg: 0.0350 (0.0363) loss_objectness: 0.0395 (0.0492) loss_rpn_box_reg: 0.0731 (0.0740) time: 1.7540 data: 0.0326 max mem: 4655

Epoch: [8] [20/120] eta: 0:03:01 lr: 0.000050 loss: 0.1946 (0.2097) loss_classifier: 0.0294 (0.0325) loss_box_reg: 0.0353 (0.0496) loss_objectness: 0.0376 (0.0488) loss_rpn_box_reg: 0.0640 (0.0788) time: 1.8029 data: 0.0076 max mem: 4655

Epoch: [8] [30/120] eta: 0:02:39 lr: 0.000050 loss: 0.1979 (0.2125) loss_classifier: 0.0341 (0.0330) loss_box_reg: 0.0465 (0.0479) loss_objectness: 0.0445 (0.0569) loss_rpn_box_reg: 0.0582 (0.0746) time: 1.7861 data: 0.0065 max mem: 4655

Epoch: [8] [40/120] eta: 0:02:21 lr: 0.000050 loss: 0.2258 (0.2208) loss_classifier: 0.0361 (0.0342) loss_box_reg: 0.0434 (0.0495) loss_objectness: 0.0580 (0.0587) loss_rpn_box_reg: 0.0694 (0.0784) time: 1.7208 data: 0.0071 max mem: 4655

Epoch: [8] [50/120] eta: 0:02:04 lr: 0.000050 loss: 0.2329 (0.2280) loss_classifier: 0.0338 (0.0344) loss_box_reg: 0.0459 (0.0503) loss_objectness: 0.0481 (0.0611) loss_rpn_box_reg: 0.0830 (0.0823) time: 1.8004 data: 0.0077 max mem: 4655

Epoch: [8] [60/120] eta: 0:01:46 lr: 0.000050 loss: 0.2273 (0.2264) loss_classifier: 0.0264 (0.0338) loss_box_reg: 0.0393 (0.0492) loss_objectness: 0.0508 (0.0618) loss_rpn_box_reg: 0.0641 (0.0816) time: 1.7912 data: 0.0076 max mem: 4655

Epoch: [8] [70/120] eta: 0:01:28 lr: 0.000050 loss: 0.2154 (0.2202) loss_classifier: 0.0235 (0.0325) loss_box_reg: 0.0293 (0.0491) loss_objectness: 0.0447 (0.0587) loss_rpn_box_reg: 0.0641 (0.0800) time: 1.7118 data: 0.0071 max mem: 4655

Epoch: [8] [80/120] eta: 0:01:11 lr: 0.000050 loss: 0.2154 (0.2220) loss_classifier: 0.0241 (0.0327) loss_box_reg: 0.0541 (0.0499) loss_objectness: 0.0447 (0.0597) loss_rpn_box_reg: 0.0561 (0.0797) time: 1.7860 data: 0.0072 max mem: 4655

Epoch: [8] [90/120] eta: 0:00:52 lr: 0.000050 loss: 0.2159 (0.2279) loss_classifier: 0.0337 (0.0334) loss_box_reg: 0.0513 (0.0504) loss_objectness: 0.0534 (0.0632) loss_rpn_box_reg: 0.0836 (0.0808) time: 1.7590 data: 0.0077 max mem: 4655

Epoch: [8] [100/120] eta: 0:00:35 lr: 0.000050 loss: 0.2237 (0.2292) loss_classifier: 0.0291 (0.0335) loss_box_reg: 0.0459 (0.0514) loss_objectness: 0.0513 (0.0620) loss_rpn_box_reg: 0.0855 (0.0823) time: 1.6973 data: 0.0075 max mem: 4655

Epoch: [8] [110/120] eta: 0:00:17 lr: 0.000050 loss: 0.2349 (0.2333) loss_classifier: 0.0280 (0.0331) loss_box_reg: 0.0459 (0.0515) loss_objectness: 0.0452 (0.0622) loss_rpn_box_reg: 0.0954 (0.0865) time: 1.8638 data: 0.0086 max mem: 4655

Epoch: [8] [119/120] eta: 0:00:01 lr: 0.000050 loss: 0.2428 (0.2351) loss_classifier: 0.0250 (0.0330) loss_box_reg: 0.0419 (0.0510) loss_objectness: 0.0556 (0.0629) loss_rpn_box_reg: 0.0926 (0.0882) time: 1.8595 data: 0.0086 max mem: 4655

Epoch: [8] Total time: 0:03:33 (1.7800 s / it)

creating index...

index created!

Test: [0/30] eta: 0:00:27 model_time: 0.6935 (0.6935) evaluator_time: 0.0058 (0.0058) time: 0.9009 data: 0.1993 max mem: 4655

Test: [29/30] eta: 0:00:00 model_time: 0.7158 (0.7445) evaluator_time: 0.0019 (0.0022) time: 0.7717 data: 0.0061 max mem: 4655

Test: Total time: 0:00:22 (0.7657 s / it)

Averaged stats: model_time: 0.7158 (0.7445) evaluator_time: 0.0019 (0.0022)

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

```

Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.543
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.826
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.612
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.727
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.554
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.427
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.607
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.607
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.787
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.607
creating index...
index created!
Test: [ 0/120] eta: 0:02:00 model_time: 0.7767 (0.7767) evalua
tor_time: 0.0051 (0.0051) time: 1.0044 data: 0.2194 max mem: 465
5
Test: [100/120] eta: 0:00:15 model_time: 0.7830 (0.7613) evalua
tor_time: 0.0017 (0.0021) time: 0.8024 data: 0.0070 max mem: 465
5
Test: [119/120] eta: 0:00:00 model_time: 0.7713 (0.7574) evalua
tor_time: 0.0020 (0.0021) time: 0.7540 data: 0.0072 max mem: 465
5
Test: Total time: 0:01:32 (0.7727 s / it)
Averaged stats: model_time: 0.7713 (0.7574) evaluator_time: 0.0020
(0.0021)
Accumulating evaluation results...
DONE (t=0.04s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.312
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.557
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.308
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.104
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.322
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.325
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.454
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.454
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000

```

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.142

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.466

Epoch: [9] [0/120] eta: 0:04:56 lr: 0.000005 loss: 0.4534 (0.4534) loss_classifier: 0.0586 (0.0586) loss_box_reg: 0.0557 (0.0557) loss_objectness: 0.1331 (0.1331) loss_rpn_box_reg: 0.2060 (0.2060) time: 2.4681 data: 0.5522 max mem: 4655

Epoch: [9] [10/120] eta: 0:03:10 lr: 0.000005 loss: 0.2107 (0.2281) loss_classifier: 0.0308 (0.0348) loss_box_reg: 0.0481 (0.0495) loss_objectness: 0.0353 (0.0487) loss_rpn_box_reg: 0.0697 (0.0951) time: 1.7335 data: 0.0543 max mem: 4655

Epoch: [9] [20/120] eta: 0:02:59 lr: 0.000005 loss: 0.2107 (0.2394) loss_classifier: 0.0256 (0.0369) loss_box_reg: 0.0446 (0.0527) loss_objectness: 0.0347 (0.0537) loss_rpn_box_reg: 0.0789 (0.0961) time: 1.7571 data: 0.0049 max mem: 4655

Epoch: [9] [30/120] eta: 0:02:38 lr: 0.000005 loss: 0.2565 (0.2428) loss_classifier: 0.0332 (0.0388) loss_box_reg: 0.0480 (0.0533) loss_objectness: 0.0515 (0.0600) loss_rpn_box_reg: 0.0771 (0.0906) time: 1.7806 data: 0.0063 max mem: 4655

Epoch: [9] [40/120] eta: 0:02:22 lr: 0.000005 loss: 0.2581 (0.2530) loss_classifier: 0.0277 (0.0371) loss_box_reg: 0.0453 (0.0519) loss_objectness: 0.0596 (0.0663) loss_rpn_box_reg: 0.0771 (0.0977) time: 1.7648 data: 0.0085 max mem: 4655

Epoch: [9] [50/120] eta: 0:02:05 lr: 0.000005 loss: 0.2424 (0.2470) loss_classifier: 0.0269 (0.0366) loss_box_reg: 0.0401 (0.0507) loss_objectness: 0.0656 (0.0671) loss_rpn_box_reg: 0.0750 (0.0925) time: 1.8363 data: 0.0095 max mem: 4655

Epoch: [9] [60/120] eta: 0:01:47 lr: 0.000005 loss: 0.2063 (0.2400) loss_classifier: 0.0266 (0.0349) loss_box_reg: 0.0305 (0.0489) loss_objectness: 0.0449 (0.0645) loss_rpn_box_reg: 0.0652 (0.0917) time: 1.8248 data: 0.0079 max mem: 4655

Epoch: [9] [70/120] eta: 0:01:29 lr: 0.000005 loss: 0.1977 (0.2391) loss_classifier: 0.0231 (0.0340) loss_box_reg: 0.0375 (0.0490) loss_objectness: 0.0377 (0.0624) loss_rpn_box_reg: 0.0786 (0.0937) time: 1.7849 data: 0.0070 max mem: 4655

Epoch: [9] [80/120] eta: 0:01:11 lr: 0.000005 loss: 0.1897 (0.2364) loss_classifier: 0.0290 (0.0339) loss_box_reg: 0.0406 (0.0484) loss_objectness: 0.0377 (0.0615) loss_rpn_box_reg: 0.0912 (0.0926) time: 1.7340 data: 0.0073 max mem: 4655

Epoch: [9] [90/120] eta: 0:00:53 lr: 0.000005 loss: 0.1897 (0.2340) loss_classifier: 0.0271 (0.0333) loss_box_reg: 0.0353 (0.0486) loss_objectness: 0.0365 (0.0605) loss_rpn_box_reg: 0.0797 (0.0916) time: 1.6964 data: 0.0078 max mem: 4655

Epoch: [9] [100/120] eta: 0:00:35 lr: 0.000005 loss: 0.1936 (0.2344) loss_classifier: 0.0261 (0.0329) loss_box_reg: 0.0414 (0.0489) loss_objectness: 0.0499 (0.0616) loss_rpn_box_reg: 0.0721 (0.0911) time: 1.6670 data: 0.0081 max mem: 4655

Epoch: [9] [110/120] eta: 0:00:17 lr: 0.000005 loss: 0.2229 (0.2324) loss_classifier: 0.0330 (0.0334) loss_box_reg: 0.0451 (0.0496) loss_objectness: 0.0511 (0.0603) loss_rpn_box_reg: 0.0727 (0.0891) time: 1.6938 data: 0.0084 max mem: 4655

Epoch: [9] [119/120] eta: 0:00:01 lr: 0.000005 loss: 0.1857 (0.2301) loss_classifier: 0.0274 (0.0330) loss_box_reg: 0.0385 (0.0490) loss_objectness: 0.0419 (0.0599) loss_rpn_box_reg: 0.0599 (0.0882) time: 1.7823 data: 0.0078 max mem: 4655

Epoch: [9] Total time: 0:03:31 (1.7625 s / it)

creating index...

index created!

Test: [0/30] eta: 0:00:28 model_time: 0.6933 (0.6933) evaluator_time: 0.0048 (0.0048) time: 0.9609 data: 0.2606 max mem: 4655

Test: [29/30] eta: 0:00:00 model_time: 0.7254 (0.7441) evaluator_time: 0.0019 (0.0023) time: 0.7724 data: 0.0059 max mem: 4655
 Test: Total time: 0:00:23 (0.7679 s / it)
 Averaged stats: model_time: 0.7254 (0.7441) evaluator_time: 0.0019 (0.0023)

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.543

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.832

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.603

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.727

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.554

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.424

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.607

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.607

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.787

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.607

creating index...

index created!

Test: [0/120] eta: 0:02:35 model_time: 0.8079 (0.8079) evaluator_time: 0.0070 (0.0070) time: 1.2931 data: 0.4686 max mem: 4655

Test: [100/120] eta: 0:00:15 model_time: 0.7465 (0.7608) evaluator_time: 0.0019 (0.0021) time: 0.7422 data: 0.0073 max mem: 4655

Test: [119/120] eta: 0:00:00 model_time: 0.7465 (0.7561) evaluator_time: 0.0019 (0.0021) time: 0.7440 data: 0.0069 max mem: 4655

Test: Total time: 0:01:32 (0.7732 s / it)

Averaged stats: model_time: 0.7465 (0.7561) evaluator_time: 0.0019 (0.0021)

Accumulating evaluation results...

DONE (t=0.04s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.314

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.557

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.322

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.026

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.327

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.323
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.451
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.451
Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000
Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.040
Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.468
Epoch: [10] [0/120] eta: 0:04:20 lr: 0.000005 loss: 0.1556
(0.1556) loss_classifier: 0.0212 (0.0212) loss_box_reg: 0.0249
(0.0249) loss_objectness: 0.0319 (0.0319) loss_rpn_box_reg: 0.0775 (0.0775) time: 2.1702 data: 0.2536 max mem: 4655
Epoch: [10] [10/120] eta: 0:03:21 lr: 0.000005 loss: 0.1823
(0.1967) loss_classifier: 0.0238 (0.0283) loss_box_reg: 0.0345
(0.0409) loss_objectness: 0.0319 (0.0354) loss_rpn_box_reg: 0.0851 (0.0921) time: 1.8280 data: 0.0304 max mem: 4655
Epoch: [10] [20/120] eta: 0:02:58 lr: 0.000005 loss: 0.2327
(0.2081) loss_classifier: 0.0231 (0.0251) loss_box_reg: 0.0252
(0.0382) loss_objectness: 0.0305 (0.0456) loss_rpn_box_reg: 0.0925 (0.0991) time: 1.7673 data: 0.0072 max mem: 4655
Epoch: [10] [30/120] eta: 0:02:42 lr: 0.000005 loss: 0.2206
(0.2147) loss_classifier: 0.0244 (0.0271) loss_box_reg: 0.0268
(0.0413) loss_objectness: 0.0408 (0.0524) loss_rpn_box_reg: 0.0724 (0.0939) time: 1.7982 data: 0.0066 max mem: 4655
Epoch: [10] [40/120] eta: 0:02:23 lr: 0.000005 loss: 0.2032
(0.2147) loss_classifier: 0.0302 (0.0280) loss_box_reg: 0.0420
(0.0441) loss_objectness: 0.0408 (0.0535) loss_rpn_box_reg: 0.0682 (0.0890) time: 1.7983 data: 0.0072 max mem: 4655
Epoch: [10] [50/120] eta: 0:02:05 lr: 0.000005 loss: 0.2112
(0.2358) loss_classifier: 0.0318 (0.0311) loss_box_reg: 0.0475
(0.0486) loss_objectness: 0.0498 (0.0601) loss_rpn_box_reg: 0.0682 (0.0961) time: 1.7740 data: 0.0082 max mem: 4655
Epoch: [10] [60/120] eta: 0:01:46 lr: 0.000005 loss: 0.2339
(0.2381) loss_classifier: 0.0318 (0.0322) loss_box_reg: 0.0474
(0.0494) loss_objectness: 0.0642 (0.0622) loss_rpn_box_reg: 0.0646 (0.0943) time: 1.7312 data: 0.0080 max mem: 4655
Epoch: [10] [70/120] eta: 0:01:28 lr: 0.000005 loss: 0.2087
(0.2386) loss_classifier: 0.0294 (0.0325) loss_box_reg: 0.0389
(0.0498) loss_objectness: 0.0575 (0.0648) loss_rpn_box_reg: 0.0646 (0.0914) time: 1.6927 data: 0.0073 max mem: 4655
Epoch: [10] [80/120] eta: 0:01:11 lr: 0.000005 loss: 0.1844
(0.2383) loss_classifier: 0.0272 (0.0326) loss_box_reg: 0.0389
(0.0489) loss_objectness: 0.0575 (0.0642) loss_rpn_box_reg: 0.0748 (0.0926) time: 1.8031 data: 0.0081 max mem: 4655
Epoch: [10] [90/120] eta: 0:00:52 lr: 0.000005 loss: 0.1757
(0.2312) loss_classifier: 0.0262 (0.0322) loss_box_reg: 0.0342
(0.0479) loss_objectness: 0.0344 (0.0617) loss_rpn_box_reg: 0.0699 (0.0895) time: 1.7594 data: 0.0077 max mem: 4655
Epoch: [10] [100/120] eta: 0:00:35 lr: 0.000005 loss: 0.1875
(0.2307) loss_classifier: 0.0291 (0.0327) loss_box_reg: 0.0399
(0.0483) loss_objectness: 0.0433 (0.0614) loss_rpn_box_reg: 0.0710 (0.0883) time: 1.7076 data: 0.0069 max mem: 4655
Epoch: [10] [110/120] eta: 0:00:17 lr: 0.000005 loss: 0.1835
(0.2256) loss_classifier: 0.0238 (0.0316) loss_box_reg: 0.0306
(0.0464) loss_objectness: 0.0477 (0.0612) loss_rpn_box_reg: 0.0710 (0.0863) time: 1.7659 data: 0.0071 max mem: 4655
Epoch: [10] [119/120] eta: 0:00:01 lr: 0.000005 loss: 0.2097


```
(0.2299) loss_classifier: 0.0248 (0.0325) loss_box_reg: 0.0352
(0.0489) loss_objectness: 0.0514 (0.0609) loss_rpn_box_reg: 0.07
77 (0.0875) time: 1.8461 data: 0.0079 max mem: 4655
Epoch: [10] Total time: 0:03:33 (1.7785 s / it)
creating index...
index created!
Test: [ 0/30] eta: 0:00:27 model_time: 0.6775 (0.6775) evaluator_time: 0.0046 (0.0046) time: 0.9056 data: 0.2200 max mem: 4655
Test: [29/30] eta: 0:00:00 model_time: 0.7136 (0.7403) evaluator_time: 0.0019 (0.0022) time: 0.7697 data: 0.0059 max mem: 4655
Test: Total time: 0:00:22 (0.7624 s / it)
Averaged stats: model_time: 0.7136 (0.7403) evaluator_time: 0.0019 (0.0022)
Accumulating evaluation results...
DONE (t=0.02s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.543
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.832
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.597
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.727
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.555
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.425
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.607
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.607
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.787
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.607
creating index...
index created!
Test: [ 0/120] eta: 0:02:10 model_time: 0.8211 (0.8211) evaluator_time: 0.0044 (0.0044) time: 1.0851 data: 0.2564 max mem: 4655
Test: [100/120] eta: 0:00:15 model_time: 0.7604 (0.7614) evaluator_time: 0.0021 (0.0022) time: 0.7989 data: 0.0076 max mem: 4655
Test: [119/120] eta: 0:00:00 model_time: 0.7574 (0.7624) evaluator_time: 0.0019 (0.0022) time: 0.7796 data: 0.0069 max mem: 4655
Test: Total time: 0:01:33 (0.7783 s / it)
Averaged stats: model_time: 0.7574 (0.7624) evaluator_time: 0.0019 (0.0022)
Accumulating evaluation results...
DONE (t=0.04s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.341
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.611
```

```
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.349
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.237
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.349
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.331
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.474
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.475
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.334
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.483
Epoch: [11] [ 0/120] eta: 0:06:19 lr: 0.000005 loss: 0.6028
(0.6028) loss_classifier: 0.0866 (0.0866) loss_box_reg: 0.1244
(0.1244) loss_objectness: 0.1434 (0.1434) loss_rpn_box_reg: 0.24
83 (0.2483) time: 3.1631 data: 0.4480 max mem: 4655
Epoch: [11] [ 10/120] eta: 0:03:30 lr: 0.000005 loss: 0.2169
(0.2549) loss_classifier: 0.0314 (0.0366) loss_box_reg: 0.0386
(0.0467) loss_objectness: 0.0474 (0.0729) loss_rpn_box_reg: 0.06
83 (0.0987) time: 1.9114 data: 0.0470 max mem: 4655
Epoch: [11] [ 20/120] eta: 0:03:03 lr: 0.000005 loss: 0.2144
(0.2544) loss_classifier: 0.0296 (0.0371) loss_box_reg: 0.0386
(0.0506) loss_objectness: 0.0474 (0.0669) loss_rpn_box_reg: 0.07
00 (0.0997) time: 1.7664 data: 0.0065 max mem: 4655
Epoch: [11] [ 30/120] eta: 0:02:40 lr: 0.000005 loss: 0.1848
(0.2288) loss_classifier: 0.0195 (0.0307) loss_box_reg: 0.0261
(0.0411) loss_objectness: 0.0365 (0.0634) loss_rpn_box_reg: 0.07
46 (0.0935) time: 1.7101 data: 0.0062 max mem: 4655
Epoch: [11] [ 40/120] eta: 0:02:21 lr: 0.000005 loss: 0.1627
(0.2274) loss_classifier: 0.0182 (0.0306) loss_box_reg: 0.0245
(0.0444) loss_objectness: 0.0348 (0.0597) loss_rpn_box_reg: 0.07
46 (0.0927) time: 1.6899 data: 0.0073 max mem: 4655
Epoch: [11] [ 50/120] eta: 0:02:03 lr: 0.000005 loss: 0.1914
(0.2220) loss_classifier: 0.0228 (0.0295) loss_box_reg: 0.0339
(0.0432) loss_objectness: 0.0383 (0.0593) loss_rpn_box_reg: 0.07
41 (0.0901) time: 1.7199 data: 0.0081 max mem: 4655
Epoch: [11] [ 60/120] eta: 0:01:45 lr: 0.000005 loss: 0.1872
(0.2227) loss_classifier: 0.0236 (0.0309) loss_box_reg: 0.0379
(0.0463) loss_objectness: 0.0508 (0.0596) loss_rpn_box_reg: 0.06
19 (0.0859) time: 1.7429 data: 0.0073 max mem: 4655
Epoch: [11] [ 70/120] eta: 0:01:27 lr: 0.000005 loss: 0.2199
(0.2257) loss_classifier: 0.0297 (0.0311) loss_box_reg: 0.0518
(0.0479) loss_objectness: 0.0508 (0.0592) loss_rpn_box_reg: 0.06
31 (0.0876) time: 1.7383 data: 0.0072 max mem: 4655
Epoch: [11] [ 80/120] eta: 0:01:09 lr: 0.000005 loss: 0.2165
(0.2262) loss_classifier: 0.0273 (0.0315) loss_box_reg: 0.0392
(0.0475) loss_objectness: 0.0458 (0.0601) loss_rpn_box_reg: 0.08
06 (0.0871) time: 1.7230 data: 0.0073 max mem: 4655
Epoch: [11] [ 90/120] eta: 0:00:53 lr: 0.000005 loss: 0.2165
(0.2325) loss_classifier: 0.0252 (0.0325) loss_box_reg: 0.0468
(0.0498) loss_objectness: 0.0458 (0.0606) loss_rpn_box_reg: 0.07
71 (0.0895) time: 1.8342 data: 0.0078 max mem: 4655
Epoch: [11] [100/120] eta: 0:00:35 lr: 0.000005 loss: 0.2103
```

```
(0.2290) loss_classifier: 0.0316 (0.0325) loss_box_reg: 0.0470
(0.0491) loss_objectness: 0.0358 (0.0593) loss_rpn_box_reg: 0.06
47 (0.0881) time: 1.8476 data: 0.0081 max mem: 4655
Epoch: [11] [110/120] eta: 0:00:17 lr: 0.000005 loss: 0.1882
(0.2273) loss_classifier: 0.0285 (0.0320) loss_box_reg: 0.0377
(0.0489) loss_objectness: 0.0358 (0.0584) loss_rpn_box_reg: 0.06
31 (0.0881) time: 1.7338 data: 0.0072 max mem: 4655
Epoch: [11] [119/120] eta: 0:00:01 lr: 0.000005 loss: 0.2440
(0.2304) loss_classifier: 0.0285 (0.0326) loss_box_reg: 0.0400
(0.0496) loss_objectness: 0.0563 (0.0605) loss_rpn_box_reg: 0.07
54 (0.0876) time: 1.8158 data: 0.0076 max mem: 4655
Epoch: [11] Total time: 0:03:33 (1.7756 s / it)
```

creating index...

index created!

```
Test: [ 0/30] eta: 0:00:29 model_time: 0.6859 (0.6859) evaluator_time: 0.0051 (0.0051) time: 0.9777 data: 0.2846 max mem: 4655
Test: [29/30] eta: 0:00:00 model_time: 0.7102 (0.7390) evaluator_time: 0.0019 (0.0023) time: 0.7679 data: 0.0058 max mem: 4655
Test: Total time: 0:00:22 (0.7626 s / it)
Averaged stats: model_time: 0.7102 (0.7390) evaluator_time: 0.0019 (0.0023)
```

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

```
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.553
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.824
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.611
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.727
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.565
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.430
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.612
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.612
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.787
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.611
```

creating index...

index created!

```
Test: [ 0/120] eta: 0:02:04 model_time: 0.7408 (0.7408) evaluator_time: 0.0048 (0.0048) time: 1.0390 data: 0.2868 max mem: 4655
Test: [100/120] eta: 0:00:15 model_time: 0.7671 (0.7498) evaluator_time: 0.0019 (0.0022) time: 0.7955 data: 0.0083 max mem: 4655
Test: [119/120] eta: 0:00:00 model_time: 0.7796 (0.7552) evaluator_time: 0.0020 (0.0022) time: 0.8058 data: 0.0072 max mem: 4655
Test: Total time: 0:01:32 (0.7711 s / it)
Averaged stats: model_time: 0.7796 (0.7552) evaluator_time: 0.0020
```

(0.0022)

Accumulating evaluation results...

DONE (t=0.04s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.325

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.570

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.329

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.202

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.332

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.317

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.464

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.464

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.287

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.473

Epoch: [12] [0/120] eta: 0:04:20 lr: 0.000001 loss: 0.1247

(0.1247) loss_classifier: 0.0153 (0.0153) loss_box_reg: 0.0171

(0.0171) loss_objectness: 0.0362 (0.0362) loss_rpn_box_reg: 0.0561 (0.0561) time: 2.1729 data: 0.3401 max mem: 4655

Epoch: [12] [10/120] eta: 0:03:30 lr: 0.000001 loss: 0.2400

(0.2431) loss_classifier: 0.0370 (0.0353) loss_box_reg: 0.0511

(0.0480) loss_objectness: 0.0362 (0.0581) loss_rpn_box_reg: 0.0817 (0.1017) time: 1.9150 data: 0.0386 max mem: 4655

Epoch: [12] [20/120] eta: 0:03:04 lr: 0.000001 loss: 0.2400

(0.2433) loss_classifier: 0.0338 (0.0341) loss_box_reg: 0.0447

(0.0527) loss_objectness: 0.0334 (0.0593) loss_rpn_box_reg: 0.0863 (0.0972) time: 1.8281 data: 0.0072 max mem: 4655

Epoch: [12] [30/120] eta: 0:02:49 lr: 0.000001 loss: 0.2404

(0.2531) loss_classifier: 0.0338 (0.0346) loss_box_reg: 0.0500

(0.0558) loss_objectness: 0.0442 (0.0622) loss_rpn_box_reg: 0.0894 (0.1005) time: 1.8731 data: 0.0069 max mem: 4655

Epoch: [12] [40/120] eta: 0:02:26 lr: 0.000001 loss: 0.2669

(0.2533) loss_classifier: 0.0341 (0.0350) loss_box_reg: 0.0596

(0.0560) loss_objectness: 0.0551 (0.0625) loss_rpn_box_reg: 0.0781 (0.0997) time: 1.8265 data: 0.0087 max mem: 4655

Epoch: [12] [50/120] eta: 0:02:07 lr: 0.000001 loss: 0.2654

(0.2560) loss_classifier: 0.0372 (0.0352) loss_box_reg: 0.0525

(0.0561) loss_objectness: 0.0708 (0.0660) loss_rpn_box_reg: 0.0781 (0.0987) time: 1.7081 data: 0.0106 max mem: 4655

Epoch: [12] [60/120] eta: 0:01:48 lr: 0.000001 loss: 0.2654

(0.2520) loss_classifier: 0.0288 (0.0346) loss_box_reg: 0.0478

(0.0545) loss_objectness: 0.0717 (0.0689) loss_rpn_box_reg: 0.0658 (0.0941) time: 1.7700 data: 0.0106 max mem: 4655

Epoch: [12] [70/120] eta: 0:01:30 lr: 0.000001 loss: 0.2532

(0.2593) loss_classifier: 0.0310 (0.0365) loss_box_reg: 0.0411

(0.0569) loss_objectness: 0.0606 (0.0699) loss_rpn_box_reg: 0.0772 (0.0961) time: 1.8085 data: 0.0084 max mem: 4655

Epoch: [12] [80/120] eta: 0:01:12 lr: 0.000001 loss: 0.2375

```

(0.2537) loss_classifier: 0.0280 (0.0361) loss_box_reg: 0.0350
(0.0541) loss_objectness: 0.0606 (0.0690) loss_rpn_box_reg: 0.08
19 (0.0945) time: 1.8279 data: 0.0072 max mem: 4655
Epoch: [12] [ 90/120] eta: 0:00:53 lr: 0.000001 loss: 0.1635
(0.2468) loss_classifier: 0.0249 (0.0351) loss_box_reg: 0.0365
(0.0531) loss_objectness: 0.0313 (0.0667) loss_rpn_box_reg: 0.07
48 (0.0920) time: 1.7380 data: 0.0076 max mem: 4655
Epoch: [12] [100/120] eta: 0:00:36 lr: 0.000001 loss: 0.1782
(0.2437) loss_classifier: 0.0239 (0.0346) loss_box_reg: 0.0416
(0.0521) loss_objectness: 0.0357 (0.0662) loss_rpn_box_reg: 0.06
90 (0.0908) time: 1.7445 data: 0.0081 max mem: 4655
Epoch: [12] [110/120] eta: 0:00:17 lr: 0.000001 loss: 0.1585
(0.2363) loss_classifier: 0.0233 (0.0338) loss_box_reg: 0.0304
(0.0508) loss_objectness: 0.0402 (0.0632) loss_rpn_box_reg: 0.06
29 (0.0884) time: 1.7669 data: 0.0074 max mem: 4655
Epoch: [12] [119/120] eta: 0:00:01 lr: 0.000001 loss: 0.1543
(0.2329) loss_classifier: 0.0172 (0.0331) loss_box_reg: 0.0257
(0.0499) loss_objectness: 0.0332 (0.0616) loss_rpn_box_reg: 0.06
68 (0.0883) time: 1.6925 data: 0.0070 max mem: 4655
Epoch: [12] Total time: 0:03:34 (1.7845 s / it)

```

creating index...

index created!

```

Test: [ 0/30] eta: 0:00:26 model_time: 0.6795 (0.6795) evaluator_time: 0.0047 (0.0047) time: 0.8896 data: 0.2032 max mem: 4655
Test: [29/30] eta: 0:00:00 model_time: 0.7176 (0.7426) evaluator_time: 0.0021 (0.0025) time: 0.7727 data: 0.0062 max mem: 4655
Test: Total time: 0:00:22 (0.7640 s / it)
Averaged stats: model_time: 0.7176 (0.7426) evaluator_time: 0.0021 (0.0025)

```

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

```

Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.544
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.830
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.595
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.727
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.555
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.425
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.608
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.608
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.787
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.608

```

creating index...

index created!

```

Test: [ 0/120] eta: 0:02:00 model_time: 0.7706 (0.7706) evaluator_time: 0.0037 (0.0037) time: 1.0062 data: 0.2289 max mem: 4655
5

```

```
Test: [100/120] eta: 0:00:15 model_time: 0.7788 (0.7631) evalua
tor_time: 0.0019 (0.0023) time: 0.7749 data: 0.0074 max mem: 465
5
Test: [119/120] eta: 0:00:00 model_time: 0.7613 (0.7651) evalua
tor_time: 0.0018 (0.0022) time: 0.7878 data: 0.0071 max mem: 465
5
Test: Total time: 0:01:33 (0.7806 s / it)
Averaged stats: model_time: 0.7613 (0.7651) evaluator_time: 0.0018
(0.0022)
Accumulating evaluation results...
DONE (t=0.04s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.326
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.586
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.317
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.209
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.331
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.332
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.461
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.463
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.297
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.468
Epoch: [13] [ 0/120] eta: 0:04:29 lr: 0.000001 loss: 0.2051
(0.2051) loss_classifier: 0.0433 (0.0433) loss_box_reg: 0.0268
(0.0268) loss_objectness: 0.0710 (0.0710) loss_rpn_box_reg: 0.06
39 (0.0639) time: 2.2462 data: 0.3406 max mem: 4655
Epoch: [13] [ 10/120] eta: 0:03:19 lr: 0.000001 loss: 0.2051
(0.2359) loss_classifier: 0.0374 (0.0357) loss_box_reg: 0.0520
(0.0522) loss_objectness: 0.0546 (0.0606) loss_rpn_box_reg: 0.06
78 (0.0874) time: 1.8119 data: 0.0379 max mem: 4655
Epoch: [13] [ 20/120] eta: 0:02:57 lr: 0.000001 loss: 0.2030
(0.2264) loss_classifier: 0.0325 (0.0323) loss_box_reg: 0.0448
(0.0484) loss_objectness: 0.0513 (0.0611) loss_rpn_box_reg: 0.06
78 (0.0847) time: 1.7467 data: 0.0066 max mem: 4655
Epoch: [13] [ 30/120] eta: 0:02:40 lr: 0.000001 loss: 0.2216
(0.2406) loss_classifier: 0.0325 (0.0331) loss_box_reg: 0.0388
(0.0514) loss_objectness: 0.0501 (0.0654) loss_rpn_box_reg: 0.06
51 (0.0907) time: 1.7757 data: 0.0068 max mem: 4740
Epoch: [13] [ 40/120] eta: 0:02:22 lr: 0.000001 loss: 0.1815
(0.2309) loss_classifier: 0.0267 (0.0315) loss_box_reg: 0.0464
(0.0523) loss_objectness: 0.0391 (0.0605) loss_rpn_box_reg: 0.06
69 (0.0867) time: 1.7921 data: 0.0083 max mem: 4740
Epoch: [13] [ 50/120] eta: 0:02:04 lr: 0.000001 loss: 0.1811
(0.2304) loss_classifier: 0.0268 (0.0318) loss_box_reg: 0.0464
(0.0526) loss_objectness: 0.0404 (0.0602) loss_rpn_box_reg: 0.06
05 (0.0858) time: 1.7470 data: 0.0095 max mem: 4740
Epoch: [13] [ 60/120] eta: 0:01:45 lr: 0.000001 loss: 0.1950
```

```

(0.2318) loss_classifier: 0.0269 (0.0331) loss_box_reg: 0.0493
(0.0510) loss_objectness: 0.0592 (0.0624) loss_rpn_box_reg: 0.06
83 (0.0853) time: 1.7236 data: 0.0086 max mem: 4740
Epoch: [13] [ 70/120] eta: 0:01:28 lr: 0.000001 loss: 0.2415
(0.2327) loss_classifier: 0.0265 (0.0324) loss_box_reg: 0.0434
(0.0513) loss_objectness: 0.0607 (0.0618) loss_rpn_box_reg: 0.08
82 (0.0871) time: 1.7414 data: 0.0069 max mem: 4740
Epoch: [13] [ 80/120] eta: 0:01:10 lr: 0.000001 loss: 0.2343
(0.2337) loss_classifier: 0.0279 (0.0327) loss_box_reg: 0.0496
(0.0513) loss_objectness: 0.0430 (0.0619) loss_rpn_box_reg: 0.08
89 (0.0878) time: 1.7203 data: 0.0076 max mem: 4740
Epoch: [13] [ 90/120] eta: 0:00:52 lr: 0.000001 loss: 0.2249
(0.2324) loss_classifier: 0.0281 (0.0326) loss_box_reg: 0.0434
(0.0511) loss_objectness: 0.0435 (0.0617) loss_rpn_box_reg: 0.07
66 (0.0870) time: 1.7458 data: 0.0077 max mem: 4740
Epoch: [13] [100/120] eta: 0:00:35 lr: 0.000001 loss: 0.2001
(0.2320) loss_classifier: 0.0237 (0.0322) loss_box_reg: 0.0356
(0.0503) loss_objectness: 0.0388 (0.0605) loss_rpn_box_reg: 0.07
99 (0.0890) time: 1.7633 data: 0.0071 max mem: 4740
Epoch: [13] [110/120] eta: 0:00:17 lr: 0.000001 loss: 0.2001
(0.2305) loss_classifier: 0.0237 (0.0325) loss_box_reg: 0.0356
(0.0500) loss_objectness: 0.0349 (0.0605) loss_rpn_box_reg: 0.07
63 (0.0876) time: 1.6567 data: 0.0071 max mem: 4740
Epoch: [13] [119/120] eta: 0:00:01 lr: 0.000001 loss: 0.2007
(0.2301) loss_classifier: 0.0249 (0.0328) loss_box_reg: 0.0352
(0.0500) loss_objectness: 0.0518 (0.0605) loss_rpn_box_reg: 0.06
20 (0.0869) time: 1.7173 data: 0.0073 max mem: 4740
Epoch: [13] Total time: 0:03:29 (1.7492 s / it)
creating index...
index created!

```

```

Test: [ 0/30] eta: 0:00:26 model_time: 0.6811 (0.6811) evaluator_time: 0.0050 (0.0050) time: 0.8989 data: 0.2106 max mem: 4740
Test: [29/30] eta: 0:00:00 model_time: 0.7206 (0.7425) evaluator_time: 0.0020 (0.0022) time: 0.7711 data: 0.0060 max mem: 4740
Test: Total time: 0:00:22 (0.7638 s / it)
Averaged stats: model_time: 0.7206 (0.7425) evaluator_time: 0.0020 (0.0022)

```

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

```

Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.544
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.830
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.595
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.727
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.555
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.425
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.608
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.608
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1

```

```

00 ] = 0.787
Average Recall      (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.608
creating index...
index created!
Test: [ 0/120] eta: 0:02:26 model_time: 0.8440 (0.8440) evalua
tor_time: 0.0038 (0.0038) time: 1.2232 data: 0.3672 max mem: 474
0
Test: [100/120] eta: 0:00:15 model_time: 0.7535 (0.7463) evalua
tor_time: 0.0018 (0.0022) time: 0.7649 data: 0.0075 max mem: 474
0
Test: [119/120] eta: 0:00:00 model_time: 0.7566 (0.7494) evalua
tor_time: 0.0018 (0.0022) time: 0.7770 data: 0.0067 max mem: 474
0
Test: Total time: 0:01:31 (0.7660 s / it)
Averaged stats: model_time: 0.7566 (0.7494) evaluator_time: 0.0018
(0.0022)
Accumulating evaluation results...
DONE (t=0.04s).
IoU metric: bbox
Average Precision  (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.281
Average Precision  (AP) @[ IoU=0.50      | area= all | maxDets=1
00 ] = 0.524
Average Precision  (AP) @[ IoU=0.75      | area= all | maxDets=1
00 ] = 0.264
Average Precision  (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision  (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.174
Average Precision  (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.287
Average Recall     (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.301
Average Recall     (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.432
Average Recall     (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.433
Average Recall     (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall     (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.243
Average Recall     (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.439
Epoch: [14] [ 0/120] eta: 0:04:35 lr: 0.000001 loss: 0.2401
(0.2401) loss_classifier: 0.0154 (0.0154) loss_box_reg: 0.0088
(0.0088) loss_objectness: 0.0652 (0.0652) loss_rpn_box_reg: 0.15
07 (0.1507) time: 2.2944 data: 0.3800 max mem: 4740
Epoch: [14] [10/120] eta: 0:03:22 lr: 0.000001 loss: 0.1891
(0.2243) loss_classifier: 0.0279 (0.0336) loss_box_reg: 0.0354
(0.0446) loss_objectness: 0.0554 (0.0637) loss_rpn_box_reg: 0.07
03 (0.0823) time: 1.8376 data: 0.0404 max mem: 4740
Epoch: [14] [20/120] eta: 0:03:03 lr: 0.000001 loss: 0.2110
(0.2401) loss_classifier: 0.0324 (0.0359) loss_box_reg: 0.0496
(0.0552) loss_objectness: 0.0554 (0.0652) loss_rpn_box_reg: 0.06
83 (0.0838) time: 1.8159 data: 0.0053 max mem: 4740
Epoch: [14] [30/120] eta: 0:02:46 lr: 0.000001 loss: 0.2595
(0.2533) loss_classifier: 0.0396 (0.0369) loss_box_reg: 0.0582
(0.0537) loss_objectness: 0.0637 (0.0680) loss_rpn_box_reg: 0.08
69 (0.0947) time: 1.8562 data: 0.0055 max mem: 4740
Epoch: [14] [40/120] eta: 0:02:25 lr: 0.000001 loss: 0.2286

```



```

(0.2456) loss_classifier: 0.0292 (0.0339) loss_box_reg: 0.0339
(0.0488) loss_objectness: 0.0663 (0.0725) loss_rpn_box_reg: 0.07
35 (0.0904) time: 1.7860 data: 0.0072 max mem: 4740
Epoch: [14] [ 50/120] eta: 0:02:07 lr: 0.000001 loss: 0.2286
(0.2534) loss_classifier: 0.0230 (0.0366) loss_box_reg: 0.0339
(0.0511) loss_objectness: 0.0693 (0.0715) loss_rpn_box_reg: 0.08
24 (0.0942) time: 1.7916 data: 0.0090 max mem: 4740
Epoch: [14] [ 60/120] eta: 0:01:48 lr: 0.000001 loss: 0.2257
(0.2481) loss_classifier: 0.0304 (0.0365) loss_box_reg: 0.0487
(0.0531) loss_objectness: 0.0348 (0.0670) loss_rpn_box_reg: 0.08
40 (0.0914) time: 1.8037 data: 0.0088 max mem: 4740
Epoch: [14] [ 70/120] eta: 0:01:31 lr: 0.000001 loss: 0.1519
(0.2391) loss_classifier: 0.0272 (0.0353) loss_box_reg: 0.0344
(0.0512) loss_objectness: 0.0264 (0.0637) loss_rpn_box_reg: 0.06
61 (0.0889) time: 1.8067 data: 0.0071 max mem: 4740
Epoch: [14] [ 80/120] eta: 0:01:12 lr: 0.000001 loss: 0.2086
(0.2426) loss_classifier: 0.0275 (0.0351) loss_box_reg: 0.0332
(0.0522) loss_objectness: 0.0435 (0.0648) loss_rpn_box_reg: 0.07
49 (0.0904) time: 1.8352 data: 0.0075 max mem: 4740
Epoch: [14] [ 90/120] eta: 0:00:54 lr: 0.000001 loss: 0.2244
(0.2390) loss_classifier: 0.0294 (0.0344) loss_box_reg: 0.0393
(0.0513) loss_objectness: 0.0446 (0.0633) loss_rpn_box_reg: 0.08
74 (0.0900) time: 1.7465 data: 0.0081 max mem: 4740
Epoch: [14] [100/120] eta: 0:00:35 lr: 0.000001 loss: 0.1836
(0.2331) loss_classifier: 0.0199 (0.0336) loss_box_reg: 0.0339
(0.0503) loss_objectness: 0.0412 (0.0612) loss_rpn_box_reg: 0.07
08 (0.0881) time: 1.6931 data: 0.0077 max mem: 4740
Epoch: [14] [110/120] eta: 0:00:17 lr: 0.000001 loss: 0.1641
(0.2294) loss_classifier: 0.0234 (0.0329) loss_box_reg: 0.0303
(0.0490) loss_objectness: 0.0308 (0.0603) loss_rpn_box_reg: 0.07
78 (0.0872) time: 1.7217 data: 0.0078 max mem: 4740
Epoch: [14] [119/120] eta: 0:00:01 lr: 0.000001 loss: 0.2112
(0.2293) loss_classifier: 0.0247 (0.0328) loss_box_reg: 0.0490
(0.0496) loss_objectness: 0.0505 (0.0599) loss_rpn_box_reg: 0.07
52 (0.0870) time: 1.7034 data: 0.0079 max mem: 4740
Epoch: [14] Total time: 0:03:33 (1.7790 s / it)

```

creating index...

index created!

```

Test: [ 0/30] eta: 0:00:27 model_time: 0.6898 (0.6898) evaluator_time: 0.0051 (0.0051) time: 0.9287 data: 0.2315 max mem: 4740

```

```

Test: [29/30] eta: 0:00:00 model_time: 0.7170 (0.7422) evaluator_time: 0.0019 (0.0022) time: 0.7706 data: 0.0059 max mem: 4740

```

```

Test: Total time: 0:00:22 (0.7643 s / it)

```

```

Averaged stats: model_time: 0.7170 (0.7422) evaluator_time: 0.0019 (0.0022)

```

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

```

Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.543

```

```

Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.830

```

```

Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.595

```

```

Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000

```

```

Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.727

```

```

Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.555

```

```

Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=

```

```

1 ] = 0.425
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.608
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.608
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.787
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.608
creating index...
index created!
Test: [ 0/120] eta: 0:03:06 model_time: 0.8318 (0.8318) evalua
tor_time: 0.0044 (0.0044) time: 1.5530 data: 0.7081 max mem: 474
0
Test: [100/120] eta: 0:00:15 model_time: 0.7618 (0.7650) evalua
tor_time: 0.0019 (0.0022) time: 0.7706 data: 0.0073 max mem: 474
0
Test: [119/120] eta: 0:00:00 model_time: 0.7425 (0.7611) evalua
tor_time: 0.0019 (0.0022) time: 0.7569 data: 0.0077 max mem: 474
0
Test: Total time: 0:01:33 (0.7804 s / it)
Averaged stats: model_time: 0.7425 (0.7611) evaluator_time: 0.0019
(0.0022)
Accumulating evaluation results...
DONE (t=0.04s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.307
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.543
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.301
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.182
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.312
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.323
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.444
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.444
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.247
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.451
Epoch: [15] [ 0/120] eta: 0:03:51 lr: 0.000000 loss: 0.1060
(0.1060) loss_classifier: 0.0145 (0.0145) loss_box_reg: 0.0177
(0.0177) loss_objectness: 0.0362 (0.0362) loss_rpn_box_reg: 0.03
76 (0.0376) time: 1.9313 data: 0.2691 max mem: 4740
Epoch: [15] [10/120] eta: 0:03:18 lr: 0.000000 loss: 0.2281
(0.2616) loss_classifier: 0.0251 (0.0326) loss_box_reg: 0.0355
(0.0480) loss_objectness: 0.0451 (0.0752) loss_rpn_box_reg: 0.08
97 (0.1058) time: 1.8042 data: 0.0353 max mem: 4740
Epoch: [15] [20/120] eta: 0:02:57 lr: 0.000000 loss: 0.2206

```

```

(0.2394) loss_classifier: 0.0293 (0.0319) loss_box_reg: 0.0396
(0.0499) loss_objectness: 0.0451 (0.0635) loss_rpn_box_reg: 0.08
42 (0.0941) time: 1.7709 data: 0.0082 max mem: 4740
Epoch: [15] [ 30/120] eta: 0:02:44 lr: 0.000000 loss: 0.2295
(0.2387) loss_classifier: 0.0293 (0.0308) loss_box_reg: 0.0429
(0.0497) loss_objectness: 0.0463 (0.0632) loss_rpn_box_reg: 0.08
14 (0.0949) time: 1.8325 data: 0.0060 max mem: 4740
Epoch: [15] [ 40/120] eta: 0:02:25 lr: 0.000000 loss: 0.2295
(0.2350) loss_classifier: 0.0301 (0.0311) loss_box_reg: 0.0429
(0.0497) loss_objectness: 0.0463 (0.0611) loss_rpn_box_reg: 0.08
14 (0.0932) time: 1.8517 data: 0.0109 max mem: 4740
Epoch: [15] [ 50/120] eta: 0:02:04 lr: 0.000000 loss: 0.1936
(0.2329) loss_classifier: 0.0301 (0.0316) loss_box_reg: 0.0419
(0.0506) loss_objectness: 0.0420 (0.0602) loss_rpn_box_reg: 0.06
76 (0.0906) time: 1.7011 data: 0.0105 max mem: 4740
Epoch: [15] [ 60/120] eta: 0:01:47 lr: 0.000000 loss: 0.1783
(0.2320) loss_classifier: 0.0281 (0.0323) loss_box_reg: 0.0401
(0.0501) loss_objectness: 0.0380 (0.0600) loss_rpn_box_reg: 0.06
61 (0.0896) time: 1.7672 data: 0.0074 max mem: 4740
Epoch: [15] [ 70/120] eta: 0:01:29 lr: 0.000000 loss: 0.2025
(0.2327) loss_classifier: 0.0300 (0.0330) loss_box_reg: 0.0526
(0.0519) loss_objectness: 0.0472 (0.0593) loss_rpn_box_reg: 0.06
61 (0.0885) time: 1.8219 data: 0.0076 max mem: 4740
Epoch: [15] [ 80/120] eta: 0:01:11 lr: 0.000000 loss: 0.2262
(0.2390) loss_classifier: 0.0318 (0.0334) loss_box_reg: 0.0526
(0.0522) loss_objectness: 0.0472 (0.0613) loss_rpn_box_reg: 0.09
36 (0.0921) time: 1.7772 data: 0.0073 max mem: 4740
Epoch: [15] [ 90/120] eta: 0:00:53 lr: 0.000000 loss: 0.2257
(0.2394) loss_classifier: 0.0374 (0.0341) loss_box_reg: 0.0612
(0.0530) loss_objectness: 0.0407 (0.0622) loss_rpn_box_reg: 0.07
78 (0.0901) time: 1.7994 data: 0.0075 max mem: 4740
Epoch: [15] [100/120] eta: 0:00:35 lr: 0.000000 loss: 0.2108
(0.2375) loss_classifier: 0.0351 (0.0333) loss_box_reg: 0.0558
(0.0525) loss_objectness: 0.0501 (0.0625) loss_rpn_box_reg: 0.06
54 (0.0891) time: 1.7315 data: 0.0081 max mem: 4740
Epoch: [15] [110/120] eta: 0:00:17 lr: 0.000000 loss: 0.1787
(0.2326) loss_classifier: 0.0206 (0.0326) loss_box_reg: 0.0283
(0.0510) loss_objectness: 0.0474 (0.0611) loss_rpn_box_reg: 0.06
86 (0.0880) time: 1.7566 data: 0.0077 max mem: 4740
Epoch: [15] [119/120] eta: 0:00:01 lr: 0.000000 loss: 0.1719
(0.2330) loss_classifier: 0.0227 (0.0330) loss_box_reg: 0.0262
(0.0507) loss_objectness: 0.0428 (0.0608) loss_rpn_box_reg: 0.06
86 (0.0885) time: 1.7710 data: 0.0068 max mem: 4740
Epoch: [15] Total time: 0:03:33 (1.7804 s / it)
creating index...
index created!
Test: [ 0/30] eta: 0:00:27 model_time: 0.7019 (0.7019) evaluator_time: 0.0043 (0.0043) time: 0.9151 data: 0.2060 max mem: 4740
Test: [29/30] eta: 0:00:00 model_time: 0.7262 (0.7411) evaluator_time: 0.0019 (0.0022) time: 0.7694 data: 0.0063 max mem: 4740
Test: Total time: 0:00:22 (0.7630 s / it)
Averaged stats: model_time: 0.7262 (0.7411) evaluator_time: 0.0019 (0.0022)
Accumulating evaluation results...
DONE (t=0.02s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.543
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.830
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.830

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00 ] = 0.595
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.727
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.555
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.425
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.608
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.608
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.787
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.608
creating index...
index created!
Test: [ 0/120] eta: 0:02:29 model_time: 0.8771 (0.8771) evalua
tor_time: 0.0033 (0.0033) time: 1.2478 data: 0.3617 max mem: 474
0
Test: [100/120] eta: 0:00:15 model_time: 0.7699 (0.7621) evalua
tor_time: 0.0018 (0.0021) time: 0.7590 data: 0.0078 max mem: 474
0
Test: [119/120] eta: 0:00:00 model_time: 0.7263 (0.7545) evalua
tor_time: 0.0020 (0.0021) time: 0.7196 data: 0.0070 max mem: 474
0
Test: Total time: 0:01:32 (0.7708 s / it)
Averaged stats: model_time: 0.7263 (0.7545) evaluator_time: 0.0020
(0.0021)
Accumulating evaluation results...
DONE (t=0.04s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.366
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.627
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.384
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.256
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.371
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.340
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.493
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.495
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.313
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.500
Epoch: [16] [ 0/120] eta: 0:03:34 lr: 0.000000 loss: 0.0992

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```
(0.0992) loss_classifier: 0.0102 (0.0102) loss_box_reg: 0.0144
(0.0144) loss_objectness: 0.0262 (0.0262) loss_rpn_box_reg: 0.04
84 (0.0484) time: 1.7859 data: 0.3181 max mem: 4740
Epoch: [16] [ 10/120] eta: 0:03:12 lr: 0.000000 loss: 0.2096
(0.2261) loss_classifier: 0.0295 (0.0294) loss_box_reg: 0.0422
(0.0506) loss_objectness: 0.0504 (0.0549) loss_rpn_box_reg: 0.07
23 (0.0912) time: 1.7470 data: 0.0352 max mem: 4740
Epoch: [16] [ 20/120] eta: 0:03:00 lr: 0.000000 loss: 0.2156
(0.2464) loss_classifier: 0.0292 (0.0325) loss_box_reg: 0.0439
(0.0499) loss_objectness: 0.0558 (0.0733) loss_rpn_box_reg: 0.07
23 (0.0907) time: 1.8083 data: 0.0068 max mem: 4740
Epoch: [16] [ 30/120] eta: 0:02:39 lr: 0.000000 loss: 0.2915
(0.2517) loss_classifier: 0.0272 (0.0318) loss_box_reg: 0.0449
(0.0483) loss_objectness: 0.0544 (0.0714) loss_rpn_box_reg: 0.09
63 (0.1002) time: 1.7870 data: 0.0066 max mem: 4740
Epoch: [16] [ 40/120] eta: 0:02:24 lr: 0.000000 loss: 0.2361
(0.2482) loss_classifier: 0.0292 (0.0327) loss_box_reg: 0.0449
(0.0525) loss_objectness: 0.0516 (0.0669) loss_rpn_box_reg: 0.08
94 (0.0962) time: 1.7941 data: 0.0074 max mem: 4740
Epoch: [16] [ 50/120] eta: 0:02:04 lr: 0.000000 loss: 0.1986
(0.2371) loss_classifier: 0.0292 (0.0325) loss_box_reg: 0.0475
(0.0532) loss_objectness: 0.0310 (0.0621) loss_rpn_box_reg: 0.05
65 (0.0894) time: 1.7921 data: 0.0075 max mem: 4740
Epoch: [16] [ 60/120] eta: 0:01:46 lr: 0.000000 loss: 0.1859
(0.2383) loss_classifier: 0.0258 (0.0321) loss_box_reg: 0.0329
(0.0505) loss_objectness: 0.0444 (0.0662) loss_rpn_box_reg: 0.05
50 (0.0895) time: 1.7401 data: 0.0083 max mem: 4740
Epoch: [16] [ 70/120] eta: 0:01:28 lr: 0.000000 loss: 0.1859
(0.2352) loss_classifier: 0.0246 (0.0317) loss_box_reg: 0.0302
(0.0499) loss_objectness: 0.0559 (0.0650) loss_rpn_box_reg: 0.06
13 (0.0887) time: 1.7110 data: 0.0088 max mem: 4740
Epoch: [16] [ 80/120] eta: 0:01:10 lr: 0.000000 loss: 0.2276
(0.2358) loss_classifier: 0.0299 (0.0324) loss_box_reg: 0.0394
(0.0512) loss_objectness: 0.0463 (0.0633) loss_rpn_box_reg: 0.08
14 (0.0890) time: 1.6610 data: 0.0077 max mem: 4740
Epoch: [16] [ 90/120] eta: 0:00:53 lr: 0.000000 loss: 0.2294
(0.2310) loss_classifier: 0.0299 (0.0322) loss_box_reg: 0.0394
(0.0503) loss_objectness: 0.0353 (0.0602) loss_rpn_box_reg: 0.08
58 (0.0883) time: 1.7890 data: 0.0074 max mem: 4740
Epoch: [16] [100/120] eta: 0:00:35 lr: 0.000000 loss: 0.2143
(0.2339) loss_classifier: 0.0328 (0.0331) loss_box_reg: 0.0481
(0.0505) loss_objectness: 0.0490 (0.0614) loss_rpn_box_reg: 0.07
31 (0.0889) time: 1.8588 data: 0.0071 max mem: 4740
Epoch: [16] [110/120] eta: 0:00:17 lr: 0.000000 loss: 0.2143
(0.2314) loss_classifier: 0.0328 (0.0327) loss_box_reg: 0.0535
(0.0505) loss_objectness: 0.0629 (0.0605) loss_rpn_box_reg: 0.08
01 (0.0877) time: 1.8259 data: 0.0071 max mem: 4740
Epoch: [16] [119/120] eta: 0:00:01 lr: 0.000000 loss: 0.1901
(0.2286) loss_classifier: 0.0228 (0.0328) loss_box_reg: 0.0431
(0.0500) loss_objectness: 0.0405 (0.0592) loss_rpn_box_reg: 0.07
52 (0.0866) time: 1.7796 data: 0.0072 max mem: 4740
Epoch: [16] Total time: 0:03:32 (1.7731 s / it)
creating index...
index created!
Test: [ 0/30] eta: 0:00:26 model_time: 0.6644 (0.6644) evaluator_time: 0.0046 (0.0046) time: 0.8774 data: 0.2062 max mem: 4740
Test: [29/30] eta: 0:00:00 model_time: 0.7274 (0.7420) evaluator_time: 0.0020 (0.0023) time: 0.7716 data: 0.0057 max mem: 4740
Test: Total time: 0:00:22 (0.7628 s / it)
Averaged stats: model_time: 0.7274 (0.7420) evaluator_time: 0.0020 (0.0023)
```

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.543

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.830

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.595

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.727

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.555

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.425

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.608

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.608

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.787

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.608

creating index...

index created!

Test: [0/120] eta: 0:03:36 model_time: 1.1761 (1.1761) evaluator_time: 0.0044 (0.0044) time: 1.8057 data: 0.6178 max mem: 4740

Test: [100/120] eta: 0:00:15 model_time: 0.7669 (0.7574) evaluator_time: 0.0018 (0.0022) time: 0.7796 data: 0.0075 max mem: 4740

Test: [119/120] eta: 0:00:00 model_time: 0.7564 (0.7568) evaluator_time: 0.0018 (0.0022) time: 0.7635 data: 0.0065 max mem: 4740

Test: Total time: 0:01:32 (0.7750 s / it)

Averaged stats: model_time: 0.7564 (0.7568) evaluator_time: 0.0018 (0.0022)

Accumulating evaluation results...

DONE (t=0.04s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.336

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.595

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.332

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.281

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.339

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.326

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.477

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.477

```
00 ] = 0.477
Average Recall      (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall      (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.373
Average Recall      (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.482
Epoch: [17] [ 0/120] eta: 0:04:04 lr: 0.000000 loss: 0.2636
(0.2636) loss_classifier: 0.0398 (0.0398) loss_box_reg: 0.0749
(0.0749) loss_objectness: 0.0515 (0.0515) loss_rpn_box_reg: 0.09
74 (0.0974) time: 2.0371 data: 0.2681 max mem: 4740
Epoch: [17] [ 10/120] eta: 0:03:08 lr: 0.000000 loss: 0.2636
(0.2750) loss_classifier: 0.0398 (0.0477) loss_box_reg: 0.0749
(0.0799) loss_objectness: 0.0636 (0.0719) loss_rpn_box_reg: 0.07
29 (0.0754) time: 1.7179 data: 0.0350 max mem: 4740
Epoch: [17] [ 20/120] eta: 0:02:55 lr: 0.000000 loss: 0.2074
(0.2330) loss_classifier: 0.0310 (0.0391) loss_box_reg: 0.0483
(0.0608) loss_objectness: 0.0478 (0.0598) loss_rpn_box_reg: 0.05
99 (0.0733) time: 1.7357 data: 0.0076 max mem: 4740
Epoch: [17] [ 30/120] eta: 0:02:43 lr: 0.000000 loss: 0.1776
(0.2415) loss_classifier: 0.0310 (0.0371) loss_box_reg: 0.0403
(0.0570) loss_objectness: 0.0393 (0.0633) loss_rpn_box_reg: 0.06
31 (0.0841) time: 1.8682 data: 0.0058 max mem: 4740
Epoch: [17] [ 40/120] eta: 0:02:23 lr: 0.000000 loss: 0.1832
(0.2357) loss_classifier: 0.0294 (0.0361) loss_box_reg: 0.0383
(0.0526) loss_objectness: 0.0448 (0.0636) loss_rpn_box_reg: 0.07
47 (0.0834) time: 1.8454 data: 0.0083 max mem: 4740
Epoch: [17] [ 50/120] eta: 0:02:05 lr: 0.000000 loss: 0.1841
(0.2280) loss_classifier: 0.0270 (0.0341) loss_box_reg: 0.0364
(0.0497) loss_objectness: 0.0493 (0.0610) loss_rpn_box_reg: 0.07
58 (0.0832) time: 1.7503 data: 0.0076 max mem: 4740
Epoch: [17] [ 60/120] eta: 0:01:46 lr: 0.000000 loss: 0.1819
(0.2240) loss_classifier: 0.0226 (0.0338) loss_box_reg: 0.0388
(0.0502) loss_objectness: 0.0424 (0.0580) loss_rpn_box_reg: 0.07
64 (0.0820) time: 1.7383 data: 0.0067 max mem: 4740
Epoch: [17] [ 70/120] eta: 0:01:28 lr: 0.000000 loss: 0.1945
(0.2274) loss_classifier: 0.0243 (0.0334) loss_box_reg: 0.0406
(0.0498) loss_objectness: 0.0393 (0.0594) loss_rpn_box_reg: 0.07
39 (0.0848) time: 1.7082 data: 0.0076 max mem: 4740
Epoch: [17] [ 80/120] eta: 0:01:10 lr: 0.000000 loss: 0.2320
(0.2345) loss_classifier: 0.0281 (0.0342) loss_box_reg: 0.0328
(0.0509) loss_objectness: 0.0611 (0.0620) loss_rpn_box_reg: 0.08
13 (0.0873) time: 1.7072 data: 0.0078 max mem: 4740
Epoch: [17] [ 90/120] eta: 0:00:53 lr: 0.000000 loss: 0.2131
(0.2340) loss_classifier: 0.0295 (0.0343) loss_box_reg: 0.0330
(0.0501) loss_objectness: 0.0437 (0.0619) loss_rpn_box_reg: 0.08
02 (0.0876) time: 1.7902 data: 0.0074 max mem: 4740
Epoch: [17] [100/120] eta: 0:00:35 lr: 0.000000 loss: 0.2024
(0.2306) loss_classifier: 0.0246 (0.0340) loss_box_reg: 0.0330
(0.0491) loss_objectness: 0.0427 (0.0613) loss_rpn_box_reg: 0.05
40 (0.0863) time: 1.8302 data: 0.0077 max mem: 4740
Epoch: [17] [110/120] eta: 0:00:17 lr: 0.000000 loss: 0.2222
(0.2318) loss_classifier: 0.0237 (0.0335) loss_box_reg: 0.0281
(0.0497) loss_objectness: 0.0510 (0.0628) loss_rpn_box_reg: 0.06
41 (0.0859) time: 1.7195 data: 0.0073 max mem: 4740
Epoch: [17] [119/120] eta: 0:00:01 lr: 0.000000 loss: 0.2245
(0.2343) loss_classifier: 0.0287 (0.0337) loss_box_reg: 0.0465
(0.0511) loss_objectness: 0.0586 (0.0628) loss_rpn_box_reg: 0.07
30 (0.0867) time: 1.7644 data: 0.0076 max mem: 4740
Epoch: [17] Total time: 0:03:32 (1.7721 s / it)
creating index...
```

index created!

Test: [0/30] eta: 0:00:27 model_time: 0.6956 (0.6956) evaluator_time: 0.0048 (0.0048) time: 0.9085 data: 0.2060 max mem: 4740
 Test: [29/30] eta: 0:00:00 model_time: 0.7194 (0.7425) evaluator_time: 0.0020 (0.0022) time: 0.7719 data: 0.0059 max mem: 4740
 Test: Total time: 0:00:22 (0.7638 s / it)
 Averaged stats: model_time: 0.7194 (0.7425) evaluator_time: 0.0020 (0.0022)

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.543

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.830

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.595

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.727

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.555

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.425

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.608

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.608

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.787

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.608

creating index...

index created!

Test: [0/120] eta: 0:02:20 model_time: 0.8228 (0.8228) evaluator_time: 0.0053 (0.0053) time: 1.1710 data: 0.3386 max mem: 4740

Test: [100/120] eta: 0:00:15 model_time: 0.7561 (0.7502) evaluator_time: 0.0021 (0.0022) time: 0.7622 data: 0.0079 max mem: 4740

Test: [119/120] eta: 0:00:00 model_time: 0.7355 (0.7466) evaluator_time: 0.0019 (0.0022) time: 0.7440 data: 0.0072 max mem: 4740

Test: Total time: 0:01:31 (0.7635 s / it)

Averaged stats: model_time: 0.7355 (0.7466) evaluator_time: 0.0019 (0.0022)

Accumulating evaluation results...

DONE (t=0.04s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.296

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.546

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.283

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=1


```
00 ] = 0.053
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.307
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.312
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.429
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.429
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.100
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.442
Epoch: [18] [ 0/120] eta: 0:04:29 lr: 0.000000 loss: 0.4516
(0.4516) loss_classifier: 0.0500 (0.0500) loss_box_reg: 0.1393
(0.1393) loss_objectness: 0.1044 (0.1044) loss_rpn_box_reg: 0.15
80 (0.1580) time: 2.2421 data: 0.3450 max mem: 4740
Epoch: [18] [ 10/120] eta: 0:03:28 lr: 0.000000 loss: 0.2285
(0.2723) loss_classifier: 0.0319 (0.0343) loss_box_reg: 0.0523
(0.0655) loss_objectness: 0.0474 (0.0638) loss_rpn_box_reg: 0.08
54 (0.1087) time: 1.8932 data: 0.0404 max mem: 4740
Epoch: [18] [ 20/120] eta: 0:03:07 lr: 0.000000 loss: 0.1887
(0.2439) loss_classifier: 0.0237 (0.0300) loss_box_reg: 0.0404
(0.0542) loss_objectness: 0.0470 (0.0574) loss_rpn_box_reg: 0.08
53 (0.1022) time: 1.8608 data: 0.0085 max mem: 4740
Epoch: [18] [ 30/120] eta: 0:02:46 lr: 0.000000 loss: 0.1821
(0.2288) loss_classifier: 0.0205 (0.0279) loss_box_reg: 0.0339
(0.0517) loss_objectness: 0.0427 (0.0566) loss_rpn_box_reg: 0.07
24 (0.0926) time: 1.8329 data: 0.0078 max mem: 4740
Epoch: [18] [ 40/120] eta: 0:02:25 lr: 0.000000 loss: 0.2009
(0.2262) loss_classifier: 0.0275 (0.0285) loss_box_reg: 0.0398
(0.0499) loss_objectness: 0.0469 (0.0567) loss_rpn_box_reg: 0.07
24 (0.0911) time: 1.7648 data: 0.0078 max mem: 4740
Epoch: [18] [ 50/120] eta: 0:02:07 lr: 0.000000 loss: 0.2147
(0.2242) loss_classifier: 0.0323 (0.0308) loss_box_reg: 0.0435
(0.0499) loss_objectness: 0.0408 (0.0559) loss_rpn_box_reg: 0.06
66 (0.0875) time: 1.7656 data: 0.0076 max mem: 4740
Epoch: [18] [ 60/120] eta: 0:01:48 lr: 0.000000 loss: 0.2147
(0.2257) loss_classifier: 0.0326 (0.0318) loss_box_reg: 0.0434
(0.0499) loss_objectness: 0.0549 (0.0587) loss_rpn_box_reg: 0.06
09 (0.0852) time: 1.7612 data: 0.0078 max mem: 4740
Epoch: [18] [ 70/120] eta: 0:01:29 lr: 0.000000 loss: 0.1904
(0.2252) loss_classifier: 0.0313 (0.0324) loss_box_reg: 0.0354
(0.0501) loss_objectness: 0.0520 (0.0574) loss_rpn_box_reg: 0.06
38 (0.0853) time: 1.7484 data: 0.0072 max mem: 4740
Epoch: [18] [ 80/120] eta: 0:01:11 lr: 0.000000 loss: 0.2021
(0.2255) loss_classifier: 0.0243 (0.0318) loss_box_reg: 0.0395
(0.0493) loss_objectness: 0.0427 (0.0580) loss_rpn_box_reg: 0.07
14 (0.0863) time: 1.7504 data: 0.0069 max mem: 4740
Epoch: [18] [ 90/120] eta: 0:00:53 lr: 0.000000 loss: 0.2110
(0.2285) loss_classifier: 0.0243 (0.0321) loss_box_reg: 0.0419
(0.0495) loss_objectness: 0.0453 (0.0605) loss_rpn_box_reg: 0.06
95 (0.0864) time: 1.6742 data: 0.0074 max mem: 4740
Epoch: [18] [100/120] eta: 0:00:35 lr: 0.000000 loss: 0.2124
(0.2313) loss_classifier: 0.0301 (0.0329) loss_box_reg: 0.0483
(0.0509) loss_objectness: 0.0502 (0.0600) loss_rpn_box_reg: 0.08
21 (0.0876) time: 1.6751 data: 0.0073 max mem: 4740
Epoch: [18] [110/120] eta: 0:00:17 lr: 0.000000 loss: 0.2092
(0.2302) loss_classifier: 0.0268 (0.0329) loss_box_reg: 0.0412
```

```
(0.0510) loss_objectness: 0.0482 (0.0593) loss_rpn_box_reg: 0.08
84 (0.0871) time: 1.7241 data: 0.0063 max mem: 4740
Epoch: [18] [119/120] eta: 0:00:01 lr: 0.000000 loss: 0.1852
(0.2293) loss_classifier: 0.0272 (0.0330) loss_box_reg: 0.0365
(0.0506) loss_objectness: 0.0428 (0.0592) loss_rpn_box_reg: 0.08
72 (0.0864) time: 1.7522 data: 0.0065 max mem: 4740
Epoch: [18] Total time: 0:03:31 (1.7653 s / it)
creating index...
```

```
index created!
```

```
Test: [ 0/30] eta: 0:00:27 model_time: 0.6827 (0.6827) evaluator_time: 0.0048 (0.0048) time: 0.9322 data: 0.2426 max mem: 4740
Test: [29/30] eta: 0:00:00 model_time: 0.7321 (0.7452) evaluator_time: 0.0019 (0.0023) time: 0.7742 data: 0.0060 max mem: 4740
Test: Total time: 0:00:23 (0.7677 s / it)
Averaged stats: model_time: 0.7321 (0.7452) evaluator_time: 0.0019 (0.0023)
```

```
Accumulating evaluation results...
```

```
DONE (t=0.02s).
```

```
IoU metric: bbox
```

```
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.543
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.830
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.595
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.727
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.555
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.425
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.608
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.608
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.787
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.608
```

```
creating index...
```

```
index created!
```

```
Test: [ 0/120] eta: 0:01:59 model_time: 0.6666 (0.6666) evaluator_time: 0.0042 (0.0042) time: 0.9961 data: 0.3227 max mem: 4740
Test: [100/120] eta: 0:00:15 model_time: 0.7537 (0.7516) evaluator_time: 0.0021 (0.0022) time: 0.7635 data: 0.0073 max mem: 4740
Test: [119/120] eta: 0:00:00 model_time: 0.7629 (0.7507) evaluator_time: 0.0019 (0.0022) time: 0.7574 data: 0.0066 max mem: 4740
Test: Total time: 0:01:31 (0.7666 s / it)
Averaged stats: model_time: 0.7629 (0.7507) evaluator_time: 0.0019 (0.0022)
```

```
Accumulating evaluation results...
```

```
DONE (t=0.04s).
```

```
IoU metric: bbox
```

```
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
```

```
00 ] = 0.267
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.508
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.249
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.076
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.276
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.295
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.407
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.407
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.127
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.418
Epoch: [19] [ 0/120] eta: 0:04:01 lr: 0.000000 loss: 0.1426
(0.1426) loss_classifier: 0.0164 (0.0164) loss_box_reg: 0.0349
(0.0349) loss_objectness: 0.0372 (0.0372) loss_rpn_box_reg: 0.05
42 (0.0542) time: 2.0154 data: 0.2762 max mem: 4740
Epoch: [19] [ 10/120] eta: 0:03:07 lr: 0.000000 loss: 0.2027
(0.1962) loss_classifier: 0.0261 (0.0281) loss_box_reg: 0.0349
(0.0375) loss_objectness: 0.0595 (0.0738) loss_rpn_box_reg: 0.04
92 (0.0568) time: 1.7053 data: 0.0332 max mem: 4740
Epoch: [19] [ 20/120] eta: 0:02:53 lr: 0.000000 loss: 0.2055
(0.2240) loss_classifier: 0.0261 (0.0304) loss_box_reg: 0.0379
(0.0459) loss_objectness: 0.0487 (0.0744) loss_rpn_box_reg: 0.05
44 (0.0734) time: 1.7234 data: 0.0069 max mem: 4740
Epoch: [19] [ 30/120] eta: 0:02:38 lr: 0.000000 loss: 0.2528
(0.2393) loss_classifier: 0.0309 (0.0327) loss_box_reg: 0.0459
(0.0523) loss_objectness: 0.0484 (0.0730) loss_rpn_box_reg: 0.07
49 (0.0814) time: 1.7975 data: 0.0060 max mem: 4740
Epoch: [19] [ 40/120] eta: 0:02:22 lr: 0.000000 loss: 0.2528
(0.2457) loss_classifier: 0.0309 (0.0318) loss_box_reg: 0.0509
(0.0528) loss_objectness: 0.0518 (0.0725) loss_rpn_box_reg: 0.10
34 (0.0887) time: 1.8251 data: 0.0076 max mem: 4740
Epoch: [19] [ 50/120] eta: 0:02:03 lr: 0.000000 loss: 0.2269
(0.2410) loss_classifier: 0.0273 (0.0324) loss_box_reg: 0.0372
(0.0524) loss_objectness: 0.0518 (0.0691) loss_rpn_box_reg: 0.09
77 (0.0870) time: 1.7714 data: 0.0075 max mem: 4740
Epoch: [19] [ 60/120] eta: 0:01:46 lr: 0.000000 loss: 0.1966
(0.2425) loss_classifier: 0.0281 (0.0326) loss_box_reg: 0.0453
(0.0537) loss_objectness: 0.0541 (0.0686) loss_rpn_box_reg: 0.07
53 (0.0876) time: 1.7812 data: 0.0066 max mem: 4740
Epoch: [19] [ 70/120] eta: 0:01:28 lr: 0.000000 loss: 0.2076
(0.2349) loss_classifier: 0.0295 (0.0315) loss_box_reg: 0.0421
(0.0512) loss_objectness: 0.0541 (0.0663) loss_rpn_box_reg: 0.07
42 (0.0859) time: 1.7828 data: 0.0075 max mem: 4740
Epoch: [19] [ 80/120] eta: 0:01:10 lr: 0.000000 loss: 0.2108
(0.2363) loss_classifier: 0.0295 (0.0318) loss_box_reg: 0.0421
(0.0515) loss_objectness: 0.0413 (0.0661) loss_rpn_box_reg: 0.07
82 (0.0869) time: 1.7107 data: 0.0077 max mem: 4740
Epoch: [19] [ 90/120] eta: 0:00:53 lr: 0.000000 loss: 0.2219
(0.2334) loss_classifier: 0.0295 (0.0322) loss_box_reg: 0.0488
```

```

(0.0503) loss_objectness: 0.0441 (0.0647) loss_rpn_box_reg: 0.07
79 (0.0861) time: 1.7511 data: 0.0070 max mem: 4740
Epoch: [19] [100/120] eta: 0:00:35 lr: 0.000000 loss: 0.2218
(0.2365) loss_classifier: 0.0328 (0.0329) loss_box_reg: 0.0465
(0.0521) loss_objectness: 0.0461 (0.0644) loss_rpn_box_reg: 0.07
63 (0.0872) time: 1.8016 data: 0.0068 max mem: 4740
Epoch: [19] [110/120] eta: 0:00:17 lr: 0.000000 loss: 0.2215
(0.2379) loss_classifier: 0.0289 (0.0327) loss_box_reg: 0.0465
(0.0514) loss_objectness: 0.0522 (0.0643) loss_rpn_box_reg: 0.09
36 (0.0895) time: 1.7659 data: 0.0076 max mem: 4740
Epoch: [19] [119/120] eta: 0:00:01 lr: 0.000000 loss: 0.1973
(0.2334) loss_classifier: 0.0230 (0.0325) loss_box_reg: 0.0267
(0.0501) loss_objectness: 0.0363 (0.0629) loss_rpn_box_reg: 0.07
10 (0.0880) time: 1.6788 data: 0.0084 max mem: 4740
Epoch: [19] Total time: 0:03:30 (1.7537 s / it)
creating index...
index created!
Test: [ 0/30] eta: 0:00:27 model_time: 0.6900 (0.6900) evaluator_time: 0.0055 (0.0055) time: 0.9260 data: 0.2277 max mem: 4740
Test: [29/30] eta: 0:00:00 model_time: 0.7281 (0.7434) evaluator_time: 0.0020 (0.0023) time: 0.7732 data: 0.0059 max mem: 4740
Test: Total time: 0:00:22 (0.7655 s / it)
Averaged stats: model_time: 0.7281 (0.7434) evaluator_time: 0.0020 (0.0023)
Accumulating evaluation results...
DONE (t=0.02s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.543
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.830
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.595
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.727
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.555
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.425
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.608
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.608
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.787
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.608
creating index...
index created!
Test: [ 0/120] eta: 0:02:21 model_time: 0.9019 (0.9019) evaluator_time: 0.0030 (0.0030) time: 1.1788 data: 0.2713 max mem: 4740
Test: [100/120] eta: 0:00:15 model_time: 0.7666 (0.7645) evaluator_time: 0.0019 (0.0021) time: 0.7548 data: 0.0074 max mem: 4740
Test: [119/120] eta: 0:00:00 model_time: 0.7555 (0.7585) evaluator_time: 0.0018 (0.0021) time: 0.7450 data: 0.0073 max mem: 4740

```

0

Test: Total time: 0:01:32 (0.7742 s / it)

Averaged stats: model_time: 0.7555 (0.7585) evaluator_time: 0.0018 (0.0021)

Accumulating evaluation results...

DONE (t=0.04s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.291

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.515

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.295

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.124

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.302

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.311

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.432

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.433

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.140

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.446

That's it!

Starting the daemon thread to refresh tokens in background for process with pid = 35914

[2021-01-04T18:59:53.193519] The experiment completed successfully. Finalizing run...

[2021-01-04T18:59:53.193539] Start FinalizingInRunHistory

[2021-01-04T18:59:53.193993] Logging experiment finalizing status in history service.

Cleaning up all outstanding Run operations, waiting 300.0 seconds
2 items cleaning up...

Cleanup took 0.13454198837280273 seconds

[2021-01-04T18:59:59.813762] Finished context manager injector.

Execution Summary

=====

RunId: torchvision_1609779936_78a787cd

Web View: https://ml.azure.com/experiments/torchvision/runs/torchvision_1609779936_78a787cd?wsid=/subscriptions/1db0a5ce-7de1-4082-8e25-3c5a4e5a9a98/resourcegroups/ProjektAzure/workspaces/ProjektAzure

WARNING - 'use_docker' parameter will be deprecated. Please use 'environment_definition' instead.

WARNING - If 'script' has been provided here and a script file name has been specified in 'run_config', 'script' provided in ScriptRunConfig initialization will take precedence.

WARNING - If 'arguments' has been provided here and arguments have been specified in 'run_config', 'arguments' provided in ScriptRunConfig initialization will take precedence.

RunId: torchvision_1609786836_0865d408

Web View: https://ml.azure.com/experiments/torchvision/runs/torchvision_1609786836_0865d408?wsid=/subscriptions/1db0a5ce-7de1-4082-8e25-3c5a4e5a9a98/resourcegroups/ProjektAzure/workspaces/ProjektAzure

Streaming azureml-logs/70_driver_log.txt

=====

```
[2021-01-04T19:00:43.278022] Entering context manager injector.
[context_manager_injector.py] Command line Options: Namespace(inject=[
'ProjectPythonPath:context_managers.ProjectPythonPath', 'RunHistory:context_managers.RunHistory', 'TrackUserError:context_managers.TrackUserError'], invocation=['train.py', '--data_path', '.', '--workers', '8', '--learning_rate', '0.005', '--epochs', '20', '--anchor_sizes', '16,32,64,128,256,512', '--anchor_aspect_ratios', '0.25,0.5,1.0,2.0', '--rpn_nms_thresh', '0.5', '--box_nms_thresh', '0.3', '--box_score_thresh', '0.1', '--num_classes', '4', '--dataset', 'monkeyCats'])
Script type = None
```

Starting the daemon thread to refresh tokens in background for process with pid = 63125

Entering Run History Context Manager.

```
[2021-01-04T19:00:46.949596] Current directory: /tmp/azureml_runs/torchvision_1609786836_0865d408
```

```
[2021-01-04T19:00:46.949639] Preparing to call script [train.py] with arguments:['--data_path', '.', '--workers', '8', '--learning_rate', '0.005', '--epochs', '20', '--anchor_sizes', '16,32,64,128,256,512', '--anchor_aspect_ratios', '0.25,0.5,1.0,2.0', '--rpn_nms_thresh', '0.5', '--box_nms_thresh', '0.3', '--box_score_thresh', '0.1', '--num_classes', '4', '--dataset', 'monkeyCats']
```

```
[2021-01-04T19:00:46.949660] After variable expansion, calling script [train.py] with arguments:['--data_path', '.', '--workers', '8', '--learning_rate', '0.005', '--epochs', '20', '--anchor_sizes', '16,32,64,128,256,512', '--anchor_aspect_ratios', '0.25,0.5,1.0,2.0', '--rpn_nms_thresh', '0.5', '--box_nms_thresh', '0.3', '--box_score_thresh', '0.1', '--num_classes', '4', '--dataset', 'monkeyCats']
```

Data/monkeyCats/JPEGImages

Data/monkeyCats/JPEGImages

<class 'str'>

```
Epoch: [0] [ 0/235] eta: 0:09:03 lr: 0.000026 loss: 2.5088 (2.5088) loss_classifier: 1.4987 (1.4987) loss_box_reg: 0.1058 (0.1058) loss_objectness: 0.6709 (0.6709) loss_rpn_box_reg: 0.2333 (0.2333) time: 2.3138 data: 0.2570 max mem: 2352
```

```
Epoch: [0] [ 10/235] eta: 0:07:38 lr: 0.000240 loss: 2.1509 (1.9416) loss_classifier: 0.8960 (0.8611) loss_box_reg: 0.0463 (0.0581) loss_objectness: 0.6792 (0.6788) loss_rpn_box_reg: 0.3677 (0.3436) time: 2.0382 data: 0.0340 max mem: 5113
```

```
Epoch: [0] [ 20/235] eta: 0:07:02 lr: 0.000453 loss: 1.2167 (1.5440) loss_classifier: 0.1232 (0.4913) loss_box_reg: 0.0573 (0.0694) loss_objectness: 0.6722 (0.6675) loss_rpn_box_reg: 0.3199 (0.3157) time: 1.9485 data: 0.0075 max mem: 5113
```

```
Epoch: [0] [ 30/235] eta: 0:06:37 lr: 0.000667 loss: 1.1062 (1.4205) loss_classifier: 0.0959 (0.3850) loss_box_reg: 0.1066 (0.0942) loss_objectness: 0.6410 (0.6538) loss_rpn_box_reg: 0.2300 (0.2875) time: 1.8820 data: 0.0048 max mem: 5113
```

```
Epoch: [0] [ 40/235] eta: 0:06:12 lr: 0.000880 loss: 1.0653 (1.3087) loss_classifier: 0.0881 (0.3089) loss_box_reg: 0.1244 (0.0963) loss_objectness: 0.6042 (0.6315) loss_rpn_box_reg: 0.2198 (0.2719) time: 1.8560 data: 0.0060 max mem: 5113
```

```
Epoch: [0] [ 50/235] eta: 0:05:55 lr: 0.001094 loss: 0.9559 (1.
```

2299) loss_classifier: 0.0636 (0.2621) loss_box_reg: 0.0911 (0.09
81) loss_objectness: 0.5427 (0.6063) loss_rpn_box_reg: 0.2010 (0.
2635) time: 1.8954 data: 0.0059 max mem: 5113
Epoch: [0] [60/235] eta: 0:05:32 lr: 0.001307 loss: 0.9717 (1.
1953) loss_classifier: 0.0776 (0.2369) loss_box_reg: 0.1109 (0.10
78) loss_objectness: 0.4788 (0.5833) loss_rpn_box_reg: 0.2042 (0.
2673) time: 1.8701 data: 0.0060 max mem: 5113
Epoch: [0] [70/235] eta: 0:05:15 lr: 0.001521 loss: 0.9154 (1.
1527) loss_classifier: 0.0776 (0.2144) loss_box_reg: 0.1112 (0.10
71) loss_objectness: 0.4603 (0.5663) loss_rpn_box_reg: 0.2432 (0.
2649) time: 1.8889 data: 0.0059 max mem: 5113
Epoch: [0] [80/235] eta: 0:04:55 lr: 0.001734 loss: 0.8722 (1.
1266) loss_classifier: 0.0656 (0.1995) loss_box_reg: 0.0984 (0.10
91) loss_objectness: 0.4326 (0.5510) loss_rpn_box_reg: 0.2622 (0.
2670) time: 1.9338 data: 0.0058 max mem: 5113
Epoch: [0] [90/235] eta: 0:04:36 lr: 0.001948 loss: 0.8901 (1.
0986) loss_classifier: 0.0698 (0.1869) loss_box_reg: 0.1080 (0.11
02) loss_objectness: 0.4182 (0.5358) loss_rpn_box_reg: 0.2647 (0.
2657) time: 1.8857 data: 0.0058 max mem: 5113
Epoch: [0] [100/235] eta: 0:04:17 lr: 0.002161 loss: 0.8809 (1.
0764) loss_classifier: 0.0852 (0.1793) loss_box_reg: 0.1126 (0.11
25) loss_objectness: 0.3912 (0.5210) loss_rpn_box_reg: 0.2382 (0.
2637) time: 1.9192 data: 0.0060 max mem: 5113
Epoch: [0] [110/235] eta: 0:04:00 lr: 0.002374 loss: 0.8334 (1.
0571) loss_classifier: 0.0831 (0.1706) loss_box_reg: 0.1200 (0.11
29) loss_objectness: 0.3595 (0.5060) loss_rpn_box_reg: 0.2672 (0.
2677) time: 2.0097 data: 0.0068 max mem: 5113
Epoch: [0] [120/235] eta: 0:03:42 lr: 0.002588 loss: 0.8529 (1.
0366) loss_classifier: 0.0743 (0.1626) loss_box_reg: 0.1189 (0.11
26) loss_objectness: 0.3334 (0.4916) loss_rpn_box_reg: 0.3014 (0.
2699) time: 2.0753 data: 0.0068 max mem: 5113
Epoch: [0] [130/235] eta: 0:03:23 lr: 0.002801 loss: 0.7635 (1.
0163) loss_classifier: 0.0720 (0.1563) loss_box_reg: 0.1097 (0.11
26) loss_objectness: 0.3115 (0.4773) loss_rpn_box_reg: 0.2494 (0.
2701) time: 2.0272 data: 0.0067 max mem: 5113
Epoch: [0] [140/235] eta: 0:03:04 lr: 0.003015 loss: 0.7422 (0.
9981) loss_classifier: 0.0753 (0.1515) loss_box_reg: 0.1113 (0.11
31) loss_objectness: 0.2834 (0.4621) loss_rpn_box_reg: 0.2683 (0.
2715) time: 1.9773 data: 0.0067 max mem: 5113
Epoch: [0] [150/235] eta: 0:02:44 lr: 0.003228 loss: 0.7422 (0.
9791) loss_classifier: 0.0923 (0.1475) loss_box_reg: 0.1309 (0.11
38) loss_objectness: 0.2454 (0.4460) loss_rpn_box_reg: 0.2945 (0.
2718) time: 1.9194 data: 0.0063 max mem: 5113
Epoch: [0] [160/235] eta: 0:02:24 lr: 0.003442 loss: 0.6656 (0.
9571) loss_classifier: 0.0722 (0.1430) loss_box_reg: 0.0994 (0.11
28) loss_objectness: 0.1725 (0.4287) loss_rpn_box_reg: 0.2786 (0.
2726) time: 1.8237 data: 0.0063 max mem: 5113
Epoch: [0] [170/235] eta: 0:02:05 lr: 0.003655 loss: 0.5799 (0.
9361) loss_classifier: 0.0651 (0.1391) loss_box_reg: 0.0778 (0.11
19) loss_objectness: 0.1230 (0.4136) loss_rpn_box_reg: 0.2681 (0.
2715) time: 1.8737 data: 0.0068 max mem: 5113
Epoch: [0] [180/235] eta: 0:01:46 lr: 0.003869 loss: 0.6603 (0.
9213) loss_classifier: 0.0821 (0.1362) loss_box_reg: 0.0848 (0.11
16) loss_objectness: 0.1382 (0.3997) loss_rpn_box_reg: 0.2656 (0.
2738) time: 2.0094 data: 0.0068 max mem: 5113
Epoch: [0] [190/235] eta: 0:01:26 lr: 0.004082 loss: 0.6693 (0.
9112) loss_classifier: 0.0820 (0.1339) loss_box_reg: 0.1038 (0.11
08) loss_objectness: 0.1496 (0.3874) loss_rpn_box_reg: 0.3033 (0.
2792) time: 1.9567 data: 0.0062 max mem: 5113
Epoch: [0] [200/235] eta: 0:01:07 lr: 0.004296 loss: 0.6588 (0.
8975) loss_classifier: 0.0772 (0.1314) loss_box_reg: 0.0805 (0.11


```

01) loss_objectness: 0.1665 (0.3790) loss_rpn_box_reg: 0.2728 (0.
2771) time: 1.8460 data: 0.0066 max mem: 5113
Epoch: [0] [210/235] eta: 0:00:48 lr: 0.004509 loss: 0.6588 (0.
8883) loss_classifier: 0.0797 (0.1293) loss_box_reg: 0.0821 (0.10
91) loss_objectness: 0.2076 (0.3713) loss_rpn_box_reg: 0.2400 (0.
2786) time: 1.8695 data: 0.0067 max mem: 5113
Epoch: [0] [220/235] eta: 0:00:28 lr: 0.004723 loss: 0.6220 (0.
8760) loss_classifier: 0.0840 (0.1276) loss_box_reg: 0.0821 (0.10
83) loss_objectness: 0.1896 (0.3625) loss_rpn_box_reg: 0.2502 (0.
2776) time: 1.8871 data: 0.0062 max mem: 5113
Epoch: [0] [230/235] eta: 0:00:09 lr: 0.004936 loss: 0.6017 (0.
8662) loss_classifier: 0.0832 (0.1258) loss_box_reg: 0.0915 (0.10
80) loss_objectness: 0.1795 (0.3552) loss_rpn_box_reg: 0.2467 (0.
2772) time: 1.9019 data: 0.0061 max mem: 5113
Epoch: [0] [234/235] eta: 0:00:01 lr: 0.005000 loss: 0.5862 (0.
8608) loss_classifier: 0.0737 (0.1244) loss_box_reg: 0.0855 (0.10
71) loss_objectness: 0.1819 (0.3517) loss_rpn_box_reg: 0.2467 (0.
2777) time: 1.9113 data: 0.0060 max mem: 5113
Epoch: [0] Total time: 0:07:32 (1.9271 s / it)

```

creating index...

index created!

<string>:6: DeprecationWarning: object of type <class 'numpy.float64'> cannot be safely interpreted as an integer.

```

Test: [ 0/26] eta: 0:00:34 model_time: 1.0823 (1.0823) evaluato
r_time: 0.0037 (0.0037) time: 1.3149 data: 0.2258 max mem: 5113
Test: [25/26] eta: 0:00:00 model_time: 0.7648 (0.7822) evaluato
r_time: 0.0028 (0.0030) time: 0.7694 data: 0.0039 max mem: 5113
Test: Total time: 0:00:20 (0.8030 s / it)

```

Averaged stats: model_time: 0.7648 (0.7822) evaluator_time: 0.0028 (0.0030)

Accumulating evaluation results...

DONE (t=0.03s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.286

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.650

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.237

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.241

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.326

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.271

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.425

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.425

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.326

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.477

creating index...

index created!

```

Test: [ 0/235] eta: 0:04:13 model_time: 0.8706 (0.8706) evalua
tor_time: 0.0036 (0.0036) time: 1.0788 data: 0.2021 max mem: 511

```

3

Test: [100/235] eta: 0:01:54 model_time: 0.8128 (0.8318) evaluator_time: 0.0028 (0.0034) time: 0.8443 data: 0.0056 max mem: 5113

3

Test: [200/235] eta: 0:00:29 model_time: 0.7987 (0.8280) evaluator_time: 0.0028 (0.0034) time: 0.8400 data: 0.0058 max mem: 5113

3

Test: [234/235] eta: 0:00:00 model_time: 0.8210 (0.8261) evaluator_time: 0.0028 (0.0034) time: 0.8198 data: 0.0057 max mem: 5113

3

Test: Total time: 0:03:17 (0.8387 s / it)

Averaged stats: model_time: 0.8210 (0.8261) evaluator_time: 0.0028 (0.0034)

Accumulating evaluation results...

DONE (t=0.12s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.137

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.377

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.080

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.060

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.160

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.146

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.272

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.276

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.132

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.320

Epoch: [1] [0/235] eta: 0:13:10 lr: 0.005000 loss: 0.5119 (0.5119) loss_classifier: 0.0449 (0.0449) loss_box_reg: 0.0472 (0.0472) loss_objectness: 0.1227 (0.1227) loss_rpn_box_reg: 0.2970 (0.2970) time: 3.3648 data: 0.2055 max mem: 5113

Epoch: [1] [10/235] eta: 0:07:43 lr: 0.005000 loss: 0.7704 (0.7790) loss_classifier: 0.0860 (0.0903) loss_box_reg: 0.0925 (0.0968) loss_objectness: 0.3069 (0.2862) loss_rpn_box_reg: 0.2679 (0.3057) time: 2.0589 data: 0.0260 max mem: 5113

Epoch: [1] [20/235] eta: 0:06:58 lr: 0.005000 loss: 0.6995 (0.7267) loss_classifier: 0.0836 (0.0887) loss_box_reg: 0.0992 (0.0959) loss_objectness: 0.2718 (0.2659) loss_rpn_box_reg: 0.2455 (0.2763) time: 1.8779 data: 0.0059 max mem: 5113

Epoch: [1] [30/235] eta: 0:06:39 lr: 0.005000 loss: 0.6149 (0.6720) loss_classifier: 0.0726 (0.0824) loss_box_reg: 0.0749 (0.0856) loss_objectness: 0.1926 (0.2418) loss_rpn_box_reg: 0.2329 (0.2622) time: 1.8895 data: 0.0049 max mem: 5113

Epoch: [1] [40/235] eta: 0:06:10 lr: 0.005000 loss: 0.5553 (0.6579) loss_classifier: 0.0744 (0.0851) loss_box_reg: 0.0778 (0.0908) loss_objectness: 0.1634 (0.2265) loss_rpn_box_reg: 0.2181 (0.2555) time: 1.8527 data: 0.0061 max mem: 5113

Epoch: [1] [50/235] eta: 0:05:55 lr: 0.005000 loss: 0.5719 (0.

6555) loss_classifier: 0.0909 (0.0897) loss_box_reg: 0.0879 (0.0922) loss_objectness: 0.1836 (0.2285) loss_rpn_box_reg: 0.1994 (0.2451) time: 1.8828 data: 0.0061 max mem: 5113
Epoch: [1] [60/235] eta: 0:05:33 lr: 0.005000 loss: 0.5719 (0.6469) loss_classifier: 0.0956 (0.0925) loss_box_reg: 0.0930 (0.0942) loss_objectness: 0.1750 (0.2228) loss_rpn_box_reg: 0.1976 (0.2374) time: 1.9208 data: 0.0062 max mem: 5113
Epoch: [1] [70/235] eta: 0:05:14 lr: 0.005000 loss: 0.5542 (0.6350) loss_classifier: 0.0870 (0.0935) loss_box_reg: 0.0859 (0.0922) loss_objectness: 0.1463 (0.2108) loss_rpn_box_reg: 0.2081 (0.2385) time: 1.8663 data: 0.0062 max mem: 5113
Epoch: [1] [80/235] eta: 0:05:01 lr: 0.005000 loss: 0.5618 (0.6353) loss_classifier: 0.0822 (0.0937) loss_box_reg: 0.0779 (0.0924) loss_objectness: 0.1463 (0.2123) loss_rpn_box_reg: 0.2022 (0.2369) time: 2.0604 data: 0.0061 max mem: 5113
Epoch: [1] [90/235] eta: 0:04:40 lr: 0.005000 loss: 0.6800 (0.6578) loss_classifier: 0.0847 (0.0951) loss_box_reg: 0.0857 (0.0945) loss_objectness: 0.2050 (0.2149) loss_rpn_box_reg: 0.2306 (0.2533) time: 2.0429 data: 0.0059 max mem: 5113
Epoch: [1] [100/235] eta: 0:04:21 lr: 0.005000 loss: 0.6992 (0.6653) loss_classifier: 0.0761 (0.0943) loss_box_reg: 0.0857 (0.0934) loss_objectness: 0.2219 (0.2185) loss_rpn_box_reg: 0.2820 (0.2591) time: 1.9154 data: 0.0064 max mem: 5113
Epoch: [1] [110/235] eta: 0:04:04 lr: 0.005000 loss: 0.6992 (0.6706) loss_classifier: 0.0721 (0.0938) loss_box_reg: 0.0772 (0.0939) loss_objectness: 0.2430 (0.2223) loss_rpn_box_reg: 0.2817 (0.2606) time: 2.0398 data: 0.0066 max mem: 5113
Epoch: [1] [120/235] eta: 0:03:44 lr: 0.005000 loss: 0.6974 (0.6696) loss_classifier: 0.0729 (0.0927) loss_box_reg: 0.0925 (0.0932) loss_objectness: 0.2333 (0.2218) loss_rpn_box_reg: 0.2555 (0.2619) time: 2.0072 data: 0.0063 max mem: 5113
Epoch: [1] [130/235] eta: 0:03:24 lr: 0.005000 loss: 0.6447 (0.6666) loss_classifier: 0.0781 (0.0924) loss_box_reg: 0.0815 (0.0926) loss_objectness: 0.2067 (0.2208) loss_rpn_box_reg: 0.2317 (0.2608) time: 1.9090 data: 0.0062 max mem: 5113
Epoch: [1] [140/235] eta: 0:03:04 lr: 0.005000 loss: 0.6897 (0.6722) loss_classifier: 0.0794 (0.0928) loss_box_reg: 0.0793 (0.0930) loss_objectness: 0.2254 (0.2226) loss_rpn_box_reg: 0.2420 (0.2638) time: 1.8989 data: 0.0058 max mem: 5113
Epoch: [1] [150/235] eta: 0:02:44 lr: 0.005000 loss: 0.6963 (0.6712) loss_classifier: 0.0794 (0.0932) loss_box_reg: 0.0861 (0.0934) loss_objectness: 0.2254 (0.2214) loss_rpn_box_reg: 0.2740 (0.2632) time: 1.8652 data: 0.0058 max mem: 5113
Epoch: [1] [160/235] eta: 0:02:25 lr: 0.005000 loss: 0.6963 (0.6741) loss_classifier: 0.0919 (0.0940) loss_box_reg: 0.0908 (0.0941) loss_objectness: 0.1631 (0.2199) loss_rpn_box_reg: 0.2890 (0.2661) time: 1.9285 data: 0.0059 max mem: 5113
Epoch: [1] [170/235] eta: 0:02:06 lr: 0.005000 loss: 0.6770 (0.6719) loss_classifier: 0.0921 (0.0937) loss_box_reg: 0.0868 (0.0939) loss_objectness: 0.1627 (0.2178) loss_rpn_box_reg: 0.2817 (0.2666) time: 1.9664 data: 0.0059 max mem: 5113
Epoch: [1] [180/235] eta: 0:01:46 lr: 0.005000 loss: 0.6258 (0.6678) loss_classifier: 0.0808 (0.0929) loss_box_reg: 0.0749 (0.0933) loss_objectness: 0.1564 (0.2142) loss_rpn_box_reg: 0.2341 (0.2674) time: 1.9467 data: 0.0058 max mem: 5113
Epoch: [1] [190/235] eta: 0:01:27 lr: 0.005000 loss: 0.5568 (0.6614) loss_classifier: 0.0750 (0.0925) loss_box_reg: 0.0669 (0.0931) loss_objectness: 0.1412 (0.2111) loss_rpn_box_reg: 0.2176 (0.2647) time: 1.9317 data: 0.0059 max mem: 5113
Epoch: [1] [200/235] eta: 0:01:07 lr: 0.005000 loss: 0.5478 (0.6566) loss_classifier: 0.0559 (0.0913) loss_box_reg: 0.0578 (0.09

```

20) loss_objectness: 0.1412 (0.2086) loss_rpn_box_reg: 0.2325 (0.
2647) time: 1.8830 data: 0.0059 max mem: 5113
Epoch: [1] [210/235] eta: 0:00:48 lr: 0.005000 loss: 0.5189 (0.
6504) loss_classifier: 0.0593 (0.0902) loss_box_reg: 0.0659 (0.09
20) loss_objectness: 0.1303 (0.2046) loss_rpn_box_reg: 0.2323 (0.
2636) time: 1.9192 data: 0.0060 max mem: 5113
Epoch: [1] [220/235] eta: 0:00:29 lr: 0.005000 loss: 0.4820 (0.
6448) loss_classifier: 0.0719 (0.0903) loss_box_reg: 0.1018 (0.09
31) loss_objectness: 0.1181 (0.2017) loss_rpn_box_reg: 0.1822 (0.
2597) time: 1.9900 data: 0.0068 max mem: 5231
Epoch: [1] [230/235] eta: 0:00:09 lr: 0.005000 loss: 0.5672 (0.
6451) loss_classifier: 0.0872 (0.0907) loss_box_reg: 0.1090 (0.09
47) loss_objectness: 0.1287 (0.2001) loss_rpn_box_reg: 0.2047 (0.
2596) time: 1.9574 data: 0.0067 max mem: 5231
Epoch: [1] [234/235] eta: 0:00:01 lr: 0.005000 loss: 0.5284 (0.
6420) loss_classifier: 0.0728 (0.0898) loss_box_reg: 0.1015 (0.09
39) loss_objectness: 0.1287 (0.1994) loss_rpn_box_reg: 0.2047 (0.
2589) time: 1.9330 data: 0.0057 max mem: 5231
Epoch: [1] Total time: 0:07:35 (1.9383 s / it)

```

creating index...

index created!

```

Test: [ 0/26] eta: 0:00:34 model_time: 1.0838 (1.0838) evaluato
r_time: 0.0041 (0.0041) time: 1.3296 data: 0.2390 max mem: 5231
Test: [25/26] eta: 0:00:00 model_time: 0.7617 (0.7764) evaluato
r_time: 0.0024 (0.0027) time: 0.7638 data: 0.0041 max mem: 5231
Test: Total time: 0:00:20 (0.7968 s / it)
Averaged stats: model_time: 0.7617 (0.7764) evaluator_time: 0.0024
(0.0027)

```

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

```

Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.283
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.594
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.203
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.224
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.320
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.283
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.400
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.400
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.251
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.461

```

creating index...

index created!

```

Test: [ 0/235] eta: 0:05:46 model_time: 1.2654 (1.2654) evalua
tor_time: 0.0038 (0.0038) time: 1.4732 data: 0.2015 max mem: 523
1
Test: [100/235] eta: 0:01:51 model_time: 0.8053 (0.8163) evalua

```

```
tor_time: 0.0025 (0.0031)  time: 0.8179  data: 0.0056  max mem: 523
1
Test: [200/235]  eta: 0:00:28  model_time: 0.7937 (0.8145)  evalua
tor_time: 0.0025 (0.0032)  time: 0.8127  data: 0.0058  max mem: 523
1
Test: [234/235]  eta: 0:00:00  model_time: 0.7656 (0.8149)  evalua
tor_time: 0.0024 (0.0031)  time: 0.7862  data: 0.0056  max mem: 523
1
Test: Total time: 0:03:14 (0.8264 s / it)
Averaged stats: model_time: 0.7656 (0.8149)  evaluator_time: 0.0024
(0.0031)
Accumulating evaluation results...
DONE (t=0.10s).
IoU metric: bbox
Average Precision  (AP) @[ IoU=0.50:0.95 | area=  all | maxDets=1
00 ] = 0.154
Average Precision  (AP) @[ IoU=0.50      | area=  all | maxDets=1
00 ] = 0.383
Average Precision  (AP) @[ IoU=0.75      | area=  all | maxDets=1
00 ] = 0.101
Average Precision  (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Precision  (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.079
Average Precision  (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.178
Average Recall     (AR) @[ IoU=0.50:0.95 | area=  all | maxDets=
1 ] = 0.167
Average Recall     (AR) @[ IoU=0.50:0.95 | area=  all | maxDets=
10 ] = 0.280
Average Recall     (AR) @[ IoU=0.50:0.95 | area=  all | maxDets=1
00 ] = 0.285
Average Recall     (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Recall     (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.137
Average Recall     (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.330
Epoch: [2] [ 0/235]  eta: 0:12:38  lr: 0.005000  loss: 0.5310 (0.
5310)  loss_classifier: 0.0726 (0.0726)  loss_box_reg: 0.1055 (0.10
55)  loss_objectness: 0.1236 (0.1236)  loss_rpn_box_reg: 0.2292 (0.
2292)  time: 3.2288  data: 0.2892  max mem: 5231
Epoch: [2] [ 10/235] eta: 0:08:02  lr: 0.005000  loss: 0.5310 (0.
5153)  loss_classifier: 0.0625 (0.0674)  loss_box_reg: 0.0788 (0.08
22)  loss_objectness: 0.1142 (0.1227)  loss_rpn_box_reg: 0.2257 (0.
2431)  time: 2.1462  data: 0.0328  max mem: 5231
Epoch: [2] [ 20/235] eta: 0:07:12  lr: 0.005000  loss: 0.5393 (0.
5279)  loss_classifier: 0.0637 (0.0735)  loss_box_reg: 0.0790 (0.09
30)  loss_objectness: 0.1211 (0.1315)  loss_rpn_box_reg: 0.2192 (0.
2299)  time: 1.9525  data: 0.0055  max mem: 5231
Epoch: [2] [ 30/235] eta: 0:06:39  lr: 0.005000  loss: 0.5084 (0.
5143)  loss_classifier: 0.0739 (0.0744)  loss_box_reg: 0.0890 (0.09
24)  loss_objectness: 0.1248 (0.1263)  loss_rpn_box_reg: 0.2135 (0.
2212)  time: 1.8422  data: 0.0049  max mem: 5231
Epoch: [2] [ 40/235] eta: 0:06:19  lr: 0.005000  loss: 0.4593 (0.
5043)  loss_classifier: 0.0658 (0.0691)  loss_box_reg: 0.0720 (0.08
54)  loss_objectness: 0.1021 (0.1242)  loss_rpn_box_reg: 0.2168 (0.
2256)  time: 1.8727  data: 0.0060  max mem: 5231
Epoch: [2] [ 50/235] eta: 0:05:55  lr: 0.005000  loss: 0.4743 (0.
5168)  loss_classifier: 0.0656 (0.0701)  loss_box_reg: 0.0755 (0.08
85)  loss_objectness: 0.1086 (0.1292)  loss_rpn_box_reg: 0.2258 (0.
```

2290) time: 1.8821 data: 0.0061 max mem: 5231
Epoch: [2] [60/235] eta: 0:05:37 lr: 0.005000 loss: 0.5661 (0.5174) loss_classifier: 0.0656 (0.0682) loss_box_reg: 0.0755 (0.0859) loss_objectness: 0.1440 (0.1333) loss_rpn_box_reg: 0.2269 (0.2300) time: 1.9000 data: 0.0060 max mem: 5231
Epoch: [2] [70/235] eta: 0:05:20 lr: 0.005000 loss: 0.4832 (0.5186) loss_classifier: 0.0462 (0.0680) loss_box_reg: 0.0611 (0.0840) loss_objectness: 0.1268 (0.1342) loss_rpn_box_reg: 0.2308 (0.2324) time: 1.9957 data: 0.0059 max mem: 5231
Epoch: [2] [80/235] eta: 0:05:01 lr: 0.005000 loss: 0.5475 (0.5257) loss_classifier: 0.0704 (0.0709) loss_box_reg: 0.0797 (0.0867) loss_objectness: 0.1353 (0.1371) loss_rpn_box_reg: 0.2160 (0.2310) time: 1.9881 data: 0.0060 max mem: 5231
Epoch: [2] [90/235] eta: 0:04:45 lr: 0.005000 loss: 0.5798 (0.5292) loss_classifier: 0.0726 (0.0707) loss_box_reg: 0.0792 (0.0860) loss_objectness: 0.1280 (0.1356) loss_rpn_box_reg: 0.1838 (0.2368) time: 2.0520 data: 0.0060 max mem: 5231
Epoch: [2] [100/235] eta: 0:04:25 lr: 0.005000 loss: 0.5450 (0.5260) loss_classifier: 0.0545 (0.0698) loss_box_reg: 0.0608 (0.0844) loss_objectness: 0.1003 (0.1329) loss_rpn_box_reg: 0.2361 (0.2388) time: 2.0451 data: 0.0060 max mem: 5231
Epoch: [2] [110/235] eta: 0:04:04 lr: 0.005000 loss: 0.4689 (0.5278) loss_classifier: 0.0714 (0.0721) loss_box_reg: 0.0828 (0.0874) loss_objectness: 0.0934 (0.1333) loss_rpn_box_reg: 0.1872 (0.2350) time: 1.9100 data: 0.0061 max mem: 5231
Epoch: [2] [120/235] eta: 0:03:42 lr: 0.005000 loss: 0.5150 (0.5263) loss_classifier: 0.0853 (0.0730) loss_box_reg: 0.0939 (0.0882) loss_objectness: 0.1130 (0.1329) loss_rpn_box_reg: 0.1937 (0.2322) time: 1.8035 data: 0.0062 max mem: 5231
Epoch: [2] [130/235] eta: 0:03:22 lr: 0.005000 loss: 0.5185 (0.5256) loss_classifier: 0.0741 (0.0724) loss_box_reg: 0.0769 (0.0868) loss_objectness: 0.1132 (0.1326) loss_rpn_box_reg: 0.1957 (0.2339) time: 1.7837 data: 0.0071 max mem: 5231
Epoch: [2] [140/235] eta: 0:03:02 lr: 0.005000 loss: 0.4311 (0.5166) loss_classifier: 0.0567 (0.0713) loss_box_reg: 0.0617 (0.0856) loss_objectness: 0.1105 (0.1308) loss_rpn_box_reg: 0.1690 (0.2289) time: 1.8537 data: 0.0070 max mem: 5231
Epoch: [2] [150/235] eta: 0:02:43 lr: 0.005000 loss: 0.4311 (0.5180) loss_classifier: 0.0637 (0.0726) loss_box_reg: 0.0733 (0.0873) loss_objectness: 0.1095 (0.1311) loss_rpn_box_reg: 0.1690 (0.2271) time: 1.8852 data: 0.0059 max mem: 5231
Epoch: [2] [160/235] eta: 0:02:25 lr: 0.005000 loss: 0.4770 (0.5134) loss_classifier: 0.0624 (0.0715) loss_box_reg: 0.0802 (0.0863) loss_objectness: 0.0851 (0.1285) loss_rpn_box_reg: 0.1774 (0.2272) time: 2.0441 data: 0.0060 max mem: 5231
Epoch: [2] [170/235] eta: 0:02:06 lr: 0.005000 loss: 0.4122 (0.5112) loss_classifier: 0.0556 (0.0718) loss_box_reg: 0.0716 (0.0859) loss_objectness: 0.0834 (0.1264) loss_rpn_box_reg: 0.1995 (0.2271) time: 2.0859 data: 0.0059 max mem: 5231
Epoch: [2] [180/235] eta: 0:01:47 lr: 0.005000 loss: 0.5066 (0.5133) loss_classifier: 0.0567 (0.0719) loss_box_reg: 0.0744 (0.0863) loss_objectness: 0.0950 (0.1255) loss_rpn_box_reg: 0.2341 (0.2297) time: 2.0427 data: 0.0058 max mem: 5231
Epoch: [2] [190/235] eta: 0:01:28 lr: 0.005000 loss: 0.5364 (0.5128) loss_classifier: 0.0621 (0.0721) loss_box_reg: 0.0854 (0.0860) loss_objectness: 0.1116 (0.1251) loss_rpn_box_reg: 0.2355 (0.2296) time: 2.0860 data: 0.0060 max mem: 5231
Epoch: [2] [200/235] eta: 0:01:08 lr: 0.005000 loss: 0.5271 (0.5137) loss_classifier: 0.0782 (0.0724) loss_box_reg: 0.0929 (0.0862) loss_objectness: 0.1130 (0.1257) loss_rpn_box_reg: 0.2233 (0.2295) time: 2.0112 data: 0.0064 max mem: 5231

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Epoch: [2] [210/235] eta: 0:00:48 lr: 0.005000 loss: 0.4969 (0.5124) loss_classifier: 0.0782 (0.0727) loss_box_reg: 0.0929 (0.0868) loss_objectness: 0.1210 (0.1255) loss_rpn_box_reg: 0.2037 (0.2274) time: 1.8823 data: 0.0067 max mem: 5231
Epoch: [2] [220/235] eta: 0:00:29 lr: 0.005000 loss: 0.4702 (0.5126) loss_classifier: 0.0665 (0.0724) loss_box_reg: 0.0702 (0.0862) loss_objectness: 0.0932 (0.1249) loss_rpn_box_reg: 0.2083 (0.2290) time: 1.8974 data: 0.0066 max mem: 5231
Epoch: [2] [230/235] eta: 0:00:09 lr: 0.005000 loss: 0.4702 (0.5104) loss_classifier: 0.0610 (0.0729) loss_box_reg: 0.0709 (0.0863) loss_objectness: 0.0918 (0.1238) loss_rpn_box_reg: 0.2083 (0.2274) time: 1.9441 data: 0.0063 max mem: 5231
Epoch: [2] [234/235] eta: 0:00:01 lr: 0.005000 loss: 0.4082 (0.5092) loss_classifier: 0.0518 (0.0726) loss_box_reg: 0.0659 (0.0859) loss_objectness: 0.0774 (0.1230) loss_rpn_box_reg: 0.1929 (0.2276) time: 1.9207 data: 0.0062 max mem: 5231
Epoch: [2] Total time: 0:07:38 (1.9495 s / it)
creating index...
index created!
Test: [ 0/26] eta: 0:00:34 model_time: 1.0727 (1.0727) evaluator_time: 0.0041 (0.0041) time: 1.3414 data: 0.2618 max mem: 5231
Test: [25/26] eta: 0:00:00 model_time: 0.7603 (0.7766) evaluator_time: 0.0023 (0.0029) time: 0.7647 data: 0.0043 max mem: 5231
Test: Total time: 0:00:20 (0.7973 s / it)
Averaged stats: model_time: 0.7603 (0.7766) evaluator_time: 0.0023 (0.0029)
Accumulating evaluation results...
DONE (t=0.02s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.316
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.609
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.292
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.359
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.344
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.242
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.423
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.423
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.469
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.448
creating index...
index created!
Test: [ 0/235] eta: 0:04:17 model_time: 0.8165 (0.8165) evaluator_time: 0.0042 (0.0042) time: 1.0972 data: 0.2743 max mem: 5231
Test: [100/235] eta: 0:01:52 model_time: 0.8020 (0.8212) evaluator_time: 0.0027 (0.0032) time: 0.8330 data: 0.0056 max mem: 5231

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Test: [200/235] eta: 0:00:29 model_time: 0.7982 (0.8268) evalua
tor_time: 0.0026 (0.0034) time: 0.8305 data: 0.0057 max mem: 523
1
Test: [234/235] eta: 0:00:00 model_time: 0.7892 (0.8223) evalua
tor_time: 0.0027 (0.0034) time: 0.8121 data: 0.0056 max mem: 523
1
Test: Total time: 0:03:16 (0.8343 s / it)
Averaged stats: model_time: 0.7892 (0.8223) evaluator_time: 0.0027
(0.0034)
Accumulating evaluation results...
DONE (t=0.10s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.158
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.390
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.107
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.021
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.116
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.179
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.136
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.302
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.313
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.020
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.242
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.336
Epoch: [3] [ 0/235] eta: 0:08:07 lr: 0.000500 loss: 0.4987 (0.
4987) loss_classifier: 0.0593 (0.0593) loss_box_reg: 0.0607 (0.06
07) loss_objectness: 0.1203 (0.1203) loss_rpn_box_reg: 0.2584 (0.
2584) time: 2.0754 data: 0.2198 max mem: 5231
Epoch: [3] [ 10/235] eta: 0:07:23 lr: 0.000500 loss: 0.4398 (0.
4454) loss_classifier: 0.0691 (0.0742) loss_box_reg: 0.1025 (0.09
50) loss_objectness: 0.0785 (0.0837) loss_rpn_box_reg: 0.1792 (0.
1925) time: 1.9697 data: 0.0266 max mem: 5231
Epoch: [3] [ 20/235] eta: 0:07:22 lr: 0.000500 loss: 0.4145 (0.
4441) loss_classifier: 0.0619 (0.0696) loss_box_reg: 0.0739 (0.08
85) loss_objectness: 0.0785 (0.0861) loss_rpn_box_reg: 0.1884 (0.
2000) time: 2.0563 data: 0.0058 max mem: 5231
Epoch: [3] [ 30/235] eta: 0:06:50 lr: 0.000500 loss: 0.4145 (0.
4449) loss_classifier: 0.0619 (0.0709) loss_box_reg: 0.0739 (0.09
10) loss_objectness: 0.0885 (0.0907) loss_rpn_box_reg: 0.1921 (0.
1923) time: 2.0211 data: 0.0052 max mem: 5231
Epoch: [3] [ 40/235] eta: 0:06:29 lr: 0.000500 loss: 0.4110 (0.
4277) loss_classifier: 0.0598 (0.0686) loss_box_reg: 0.0630 (0.08
34) loss_objectness: 0.0738 (0.0876) loss_rpn_box_reg: 0.1764 (0.
1881) time: 1.9359 data: 0.0059 max mem: 5231
Epoch: [3] [ 50/235] eta: 0:06:15 lr: 0.000500 loss: 0.4265 (0.
4339) loss_classifier: 0.0568 (0.0675) loss_box_reg: 0.0595 (0.08
08) loss_objectness: 0.0774 (0.0897) loss_rpn_box_reg: 0.1961 (0.
1959) time: 2.0761 data: 0.0060 max mem: 5231
Epoch: [3] [ 60/235] eta: 0:05:49 lr: 0.000500 loss: 0.4033 (0.
```


4230) loss_classifier: 0.0550 (0.0666) loss_box_reg: 0.0662 (0.0781) loss_objectness: 0.0863 (0.0885) loss_rpn_box_reg: 0.1744 (0.1898) time: 1.9944 data: 0.0060 max mem: 5231
Epoch: [3] [70/235] eta: 0:05:29 lr: 0.000500 loss: 0.3655 (0.4213) loss_classifier: 0.0574 (0.0661) loss_box_reg: 0.0662 (0.0787) loss_objectness: 0.0748 (0.0888) loss_rpn_box_reg: 0.1474 (0.1877) time: 1.9056 data: 0.0059 max mem: 5231
Epoch: [3] [80/235] eta: 0:05:09 lr: 0.000500 loss: 0.4533 (0.4229) loss_classifier: 0.0658 (0.0662) loss_box_reg: 0.0988 (0.0801) loss_objectness: 0.0944 (0.0906) loss_rpn_box_reg: 0.1636 (0.1860) time: 1.9969 data: 0.0060 max mem: 5231
Epoch: [3] [90/235] eta: 0:04:48 lr: 0.000500 loss: 0.4533 (0.4222) loss_classifier: 0.0658 (0.0664) loss_box_reg: 0.0859 (0.0810) loss_objectness: 0.0864 (0.0901) loss_rpn_box_reg: 0.1636 (0.1847) time: 1.9547 data: 0.0060 max mem: 5231
Epoch: [3] [100/235] eta: 0:04:28 lr: 0.000500 loss: 0.4019 (0.4236) loss_classifier: 0.0538 (0.0661) loss_box_reg: 0.0731 (0.0811) loss_objectness: 0.0703 (0.0897) loss_rpn_box_reg: 0.1714 (0.1868) time: 1.9586 data: 0.0059 max mem: 5231
Epoch: [3] [110/235] eta: 0:04:08 lr: 0.000500 loss: 0.3893 (0.4165) loss_classifier: 0.0529 (0.0642) loss_box_reg: 0.0693 (0.0789) loss_objectness: 0.0703 (0.0893) loss_rpn_box_reg: 0.1665 (0.1842) time: 1.9840 data: 0.0061 max mem: 5231
Epoch: [3] [120/235] eta: 0:03:47 lr: 0.000500 loss: 0.3571 (0.4181) loss_classifier: 0.0527 (0.0643) loss_box_reg: 0.0636 (0.0795) loss_objectness: 0.0933 (0.0901) loss_rpn_box_reg: 0.1616 (0.1841) time: 1.9352 data: 0.0061 max mem: 5231
Epoch: [3] [130/235] eta: 0:03:28 lr: 0.000500 loss: 0.3534 (0.4117) loss_classifier: 0.0502 (0.0629) loss_box_reg: 0.0629 (0.0786) loss_objectness: 0.0744 (0.0893) loss_rpn_box_reg: 0.1600 (0.1809) time: 1.9790 data: 0.0059 max mem: 5231
Epoch: [3] [140/235] eta: 0:03:09 lr: 0.000500 loss: 0.3632 (0.4099) loss_classifier: 0.0532 (0.0626) loss_box_reg: 0.0677 (0.0789) loss_objectness: 0.0594 (0.0877) loss_rpn_box_reg: 0.1600 (0.1807) time: 2.0503 data: 0.0060 max mem: 5231
Epoch: [3] [150/235] eta: 0:02:48 lr: 0.000500 loss: 0.3871 (0.4102) loss_classifier: 0.0565 (0.0629) loss_box_reg: 0.0745 (0.0797) loss_objectness: 0.0594 (0.0879) loss_rpn_box_reg: 0.1633 (0.1797) time: 1.9464 data: 0.0061 max mem: 5231
Epoch: [3] [160/235] eta: 0:02:28 lr: 0.000500 loss: 0.3802 (0.4090) loss_classifier: 0.0430 (0.0625) loss_box_reg: 0.0515 (0.0794) loss_objectness: 0.0844 (0.0878) loss_rpn_box_reg: 0.1574 (0.1793) time: 1.9417 data: 0.0060 max mem: 5231
Epoch: [3] [170/235] eta: 0:02:08 lr: 0.000500 loss: 0.3802 (0.4092) loss_classifier: 0.0407 (0.0618) loss_box_reg: 0.0579 (0.0789) loss_objectness: 0.0844 (0.0889) loss_rpn_box_reg: 0.1498 (0.1795) time: 1.9759 data: 0.0059 max mem: 5231
Epoch: [3] [180/235] eta: 0:01:49 lr: 0.000500 loss: 0.3643 (0.4063) loss_classifier: 0.0407 (0.0610) loss_box_reg: 0.0579 (0.0783) loss_objectness: 0.0716 (0.0885) loss_rpn_box_reg: 0.1567 (0.1784) time: 1.9722 data: 0.0059 max mem: 5231
Epoch: [3] [190/235] eta: 0:01:28 lr: 0.000500 loss: 0.3066 (0.4043) loss_classifier: 0.0446 (0.0611) loss_box_reg: 0.0665 (0.0788) loss_objectness: 0.0603 (0.0875) loss_rpn_box_reg: 0.1357 (0.1769) time: 1.9309 data: 0.0060 max mem: 5231
Epoch: [3] [200/235] eta: 0:01:09 lr: 0.000500 loss: 0.2819 (0.3982) loss_classifier: 0.0446 (0.0605) loss_box_reg: 0.0670 (0.0776) loss_objectness: 0.0549 (0.0858) loss_rpn_box_reg: 0.1199 (0.1742) time: 1.8720 data: 0.0062 max mem: 5231
Epoch: [3] [210/235] eta: 0:00:49 lr: 0.000500 loss: 0.3341 (0.3989) loss_classifier: 0.0406 (0.0602) loss_box_reg: 0.0578 (0.07

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75) loss_objectness: 0.0564 (0.0861) loss_rpn_box_reg: 0.1284 (0.
1752) time: 1.9883 data: 0.0063 max mem: 5231
Epoch: [3] [220/235] eta: 0:00:29 lr: 0.000500 loss: 0.4129 (0.
3990) loss_classifier: 0.0504 (0.0598) loss_box_reg: 0.0595 (0.07
70) loss_objectness: 0.0776 (0.0865) loss_rpn_box_reg: 0.1971 (0.
1758) time: 1.9831 data: 0.0060 max mem: 5231
Epoch: [3] [230/235] eta: 0:00:09 lr: 0.000500 loss: 0.3603 (0.
3982) loss_classifier: 0.0507 (0.0600) loss_box_reg: 0.0719 (0.07
75) loss_objectness: 0.0690 (0.0862) loss_rpn_box_reg: 0.1533 (0.
1745) time: 1.9768 data: 0.0059 max mem: 5231
Epoch: [3] [234/235] eta: 0:00:01 lr: 0.000500 loss: 0.3655 (0.
3985) loss_classifier: 0.0504 (0.0596) loss_box_reg: 0.0719 (0.07
73) loss_objectness: 0.0629 (0.0862) loss_rpn_box_reg: 0.1533 (0.
1754) time: 1.8871 data: 0.0058 max mem: 5231
Epoch: [3] Total time: 0:07:42 (1.9684 s / it)
creating index...
index created!
Test: [ 0/26] eta: 0:00:34 model_time: 1.0562 (1.0562) evaluato
r_time: 0.0049 (0.0049) time: 1.3133 data: 0.2480 max mem: 5231
Test: [25/26] eta: 0:00:00 model_time: 0.7564 (0.7770) evaluato
r_time: 0.0024 (0.0028) time: 0.7659 data: 0.0037 max mem: 5231
Test: Total time: 0:00:20 (0.7976 s / it)
Averaged stats: model_time: 0.7564 (0.7770) evaluator_time: 0.0024
(0.0028)
Accumulating evaluation results...
DONE (t=0.02s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.474
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.764
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.491
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.471
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.514
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.340
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.552
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.552
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.553
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.592
creating index...
index created!
Test: [ 0/235] eta: 0:04:56 model_time: 0.9768 (0.9768) evalua
tor_time: 0.0062 (0.0062) time: 1.2635 data: 0.2777 max mem: 523
1
Test: [100/235] eta: 0:01:55 model_time: 0.8002 (0.8397) evalua
tor_time: 0.0025 (0.0033) time: 0.8185 data: 0.0057 max mem: 523
1
Test: [200/235] eta: 0:00:29 model_time: 0.8021 (0.8345) evalua
tor_time: 0.0024 (0.0031) time: 0.8685 data: 0.0075 max mem: 523

```

1

Test: [234/235] eta: 0:00:00 model_time: 0.7921 (0.8269) evaluator_time: 0.0026 (0.0032) time: 0.7981 data: 0.0090 max mem: 5231

1

Test: Total time: 0:03:17 (0.8394 s / it)

Averaged stats: model_time: 0.7921 (0.8269) evaluator_time: 0.0026 (0.0032)

Accumulating evaluation results...

DONE (t=0.09s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.227

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.477

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.200

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.062

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.135

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.268

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.210

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.387

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.402

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.060

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.262

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.444

Epoch: [4] [0/235] eta: 0:11:22 lr: 0.000500 loss: 0.2571 (0.2571) loss_classifier: 0.0140 (0.0140) loss_box_reg: 0.0309 (0.0309) loss_objectness: 0.0313 (0.0313) loss_rpn_box_reg: 0.1809 (0.1809) time: 2.9038 data: 0.2878 max mem: 5231

Epoch: [4] [10/235] eta: 0:07:58 lr: 0.000500 loss: 0.2953 (0.3709) loss_classifier: 0.0495 (0.0532) loss_box_reg: 0.0463 (0.0648) loss_objectness: 0.0809 (0.0867) loss_rpn_box_reg: 0.1542 (0.1662) time: 2.1278 data: 0.0306 max mem: 5231

Epoch: [4] [20/235] eta: 0:07:08 lr: 0.000500 loss: 0.4057 (0.3895) loss_classifier: 0.0518 (0.0573) loss_box_reg: 0.0652 (0.0756) loss_objectness: 0.0779 (0.0849) loss_rpn_box_reg: 0.1542 (0.1718) time: 1.9481 data: 0.0050 max mem: 5231

Epoch: [4] [30/235] eta: 0:06:44 lr: 0.000500 loss: 0.3519 (0.3785) loss_classifier: 0.0556 (0.0573) loss_box_reg: 0.0751 (0.0773) loss_objectness: 0.0626 (0.0794) loss_rpn_box_reg: 0.1559 (0.1646) time: 1.8854 data: 0.0056 max mem: 5231

Epoch: [4] [40/235] eta: 0:06:24 lr: 0.000500 loss: 0.3832 (0.3890) loss_classifier: 0.0538 (0.0600) loss_box_reg: 0.0577 (0.0782) loss_objectness: 0.0618 (0.0807) loss_rpn_box_reg: 0.1645 (0.1701) time: 1.9510 data: 0.0060 max mem: 5231

Epoch: [4] [50/235] eta: 0:06:01 lr: 0.000500 loss: 0.3836 (0.3807) loss_classifier: 0.0511 (0.0582) loss_box_reg: 0.0590 (0.0759) loss_objectness: 0.0682 (0.0787) loss_rpn_box_reg: 0.1603 (0.1679) time: 1.9255 data: 0.0060 max mem: 5231

Epoch: [4] [60/235] eta: 0:05:39 lr: 0.000500 loss: 0.3559 (0.3804) loss_classifier: 0.0493 (0.0586) loss_box_reg: 0.0801 (0.0767) loss_objectness: 0.0674 (0.0778) loss_rpn_box_reg: 0.1507 (0.

1673) time: 1.8716 data: 0.0075 max mem: 5231
Epoch: [4] [70/235] eta: 0:05:19 lr: 0.000500 loss: 0.3509 (0.3765) loss_classifier: 0.0493 (0.0578) loss_box_reg: 0.0632 (0.0770) loss_objectness: 0.0656 (0.0774) loss_rpn_box_reg: 0.1353 (0.1642) time: 1.8831 data: 0.0074 max mem: 5231
Epoch: [4] [80/235] eta: 0:04:59 lr: 0.000500 loss: 0.3589 (0.3777) loss_classifier: 0.0446 (0.0575) loss_box_reg: 0.0646 (0.0785) loss_objectness: 0.0609 (0.0772) loss_rpn_box_reg: 0.1469 (0.1646) time: 1.9048 data: 0.0059 max mem: 5231
Epoch: [4] [90/235] eta: 0:04:44 lr: 0.000500 loss: 0.3835 (0.3772) loss_classifier: 0.0467 (0.0569) loss_box_reg: 0.0646 (0.0776) loss_objectness: 0.0604 (0.0763) loss_rpn_box_reg: 0.1758 (0.1664) time: 2.0765 data: 0.0060 max mem: 5231
Epoch: [4] [100/235] eta: 0:04:24 lr: 0.000500 loss: 0.3655 (0.3776) loss_classifier: 0.0562 (0.0564) loss_box_reg: 0.0548 (0.0768) loss_objectness: 0.0633 (0.0769) loss_rpn_box_reg: 0.1562 (0.1675) time: 2.0837 data: 0.0061 max mem: 5231
Epoch: [4] [110/235] eta: 0:04:05 lr: 0.000500 loss: 0.3432 (0.3741) loss_classifier: 0.0453 (0.0556) loss_box_reg: 0.0552 (0.0754) loss_objectness: 0.0633 (0.0770) loss_rpn_box_reg: 0.1501 (0.1661) time: 1.9428 data: 0.0060 max mem: 5231
Epoch: [4] [120/235] eta: 0:03:44 lr: 0.000500 loss: 0.3212 (0.3740) loss_classifier: 0.0411 (0.0549) loss_box_reg: 0.0538 (0.0740) loss_objectness: 0.0508 (0.0765) loss_rpn_box_reg: 0.1693 (0.1687) time: 1.9317 data: 0.0061 max mem: 5231
Epoch: [4] [130/235] eta: 0:03:25 lr: 0.000500 loss: 0.3666 (0.3739) loss_classifier: 0.0483 (0.0550) loss_box_reg: 0.0571 (0.0740) loss_objectness: 0.0508 (0.0758) loss_rpn_box_reg: 0.1794 (0.1691) time: 1.9579 data: 0.0062 max mem: 5231
Epoch: [4] [140/235] eta: 0:03:06 lr: 0.000500 loss: 0.3512 (0.3721) loss_classifier: 0.0438 (0.0552) loss_box_reg: 0.0577 (0.0737) loss_objectness: 0.0467 (0.0740) loss_rpn_box_reg: 0.1737 (0.1693) time: 1.9986 data: 0.0064 max mem: 5231
Epoch: [4] [150/235] eta: 0:02:46 lr: 0.000500 loss: 0.3375 (0.3725) loss_classifier: 0.0446 (0.0551) loss_box_reg: 0.0577 (0.0734) loss_objectness: 0.0579 (0.0750) loss_rpn_box_reg: 0.1737 (0.1690) time: 1.9345 data: 0.0063 max mem: 5231
Epoch: [4] [160/235] eta: 0:02:26 lr: 0.000500 loss: 0.3375 (0.3712) loss_classifier: 0.0535 (0.0548) loss_box_reg: 0.0624 (0.0731) loss_objectness: 0.0782 (0.0754) loss_rpn_box_reg: 0.1552 (0.1679) time: 1.8674 data: 0.0061 max mem: 5231
Epoch: [4] [170/235] eta: 0:02:06 lr: 0.000500 loss: 0.3470 (0.3717) loss_classifier: 0.0576 (0.0552) loss_box_reg: 0.0660 (0.0746) loss_objectness: 0.0599 (0.0748) loss_rpn_box_reg: 0.1475 (0.1672) time: 1.8535 data: 0.0061 max mem: 5231
Epoch: [4] [180/235] eta: 0:01:46 lr: 0.000500 loss: 0.3412 (0.3707) loss_classifier: 0.0593 (0.0552) loss_box_reg: 0.0726 (0.0748) loss_objectness: 0.0537 (0.0747) loss_rpn_box_reg: 0.1426 (0.1660) time: 1.8204 data: 0.0061 max mem: 5231
Epoch: [4] [190/235] eta: 0:01:27 lr: 0.000500 loss: 0.3265 (0.3703) loss_classifier: 0.0431 (0.0548) loss_box_reg: 0.0596 (0.0745) loss_objectness: 0.0653 (0.0745) loss_rpn_box_reg: 0.1395 (0.1665) time: 1.8629 data: 0.0062 max mem: 5231
Epoch: [4] [200/235] eta: 0:01:07 lr: 0.000500 loss: 0.3415 (0.3713) loss_classifier: 0.0459 (0.0554) loss_box_reg: 0.0647 (0.0755) loss_objectness: 0.0653 (0.0739) loss_rpn_box_reg: 0.1766 (0.1666) time: 1.9222 data: 0.0063 max mem: 5231
Epoch: [4] [210/235] eta: 0:00:48 lr: 0.000500 loss: 0.3146 (0.3672) loss_classifier: 0.0452 (0.0545) loss_box_reg: 0.0607 (0.0743) loss_objectness: 0.0504 (0.0729) loss_rpn_box_reg: 0.1448 (0.1654) time: 1.9232 data: 0.0062 max mem: 5231

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Epoch: [4] [220/235] eta: 0:00:28 lr: 0.000500 loss: 0.2761 (0.3652) loss_classifier: 0.0343 (0.0541) loss_box_reg: 0.0522 (0.0740) loss_objectness: 0.0530 (0.0722) loss_rpn_box_reg: 0.1448 (0.1650) time: 1.8751 data: 0.0061 max mem: 5231
Epoch: [4] [230/235] eta: 0:00:09 lr: 0.000500 loss: 0.3173 (0.3635) loss_classifier: 0.0351 (0.0536) loss_box_reg: 0.0570 (0.0732) loss_objectness: 0.0530 (0.0715) loss_rpn_box_reg: 0.1659 (0.1653) time: 1.8321 data: 0.0060 max mem: 5231
Epoch: [4] [234/235] eta: 0:00:01 lr: 0.000500 loss: 0.3267 (0.3645) loss_classifier: 0.0362 (0.0540) loss_box_reg: 0.0570 (0.0744) loss_objectness: 0.0583 (0.0715) loss_rpn_box_reg: 0.1659 (0.1646) time: 1.7984 data: 0.0059 max mem: 5231
Epoch: [4] Total time: 0:07:31 (1.9220 s / it)
creating index...
index created!
Test: [ 0/26] eta: 0:00:34 model_time: 1.0779 (1.0779) evaluator_time: 0.0038 (0.0038) time: 1.3186 data: 0.2336 max mem: 5231
Test: [25/26] eta: 0:00:00 model_time: 0.7587 (0.7735) evaluator_time: 0.0022 (0.0025) time: 0.7612 data: 0.0040 max mem: 5231
Test: Total time: 0:00:20 (0.7932 s / it)
Averaged stats: model_time: 0.7587 (0.7735) evaluator_time: 0.0022 (0.0025)
Accumulating evaluation results...
DONE (t=0.02s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.497
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.775
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.531
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.471
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.541
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.353
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.575
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.575
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.549
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.622
creating index...
index created!
Test: [ 0/235] eta: 0:04:23 model_time: 0.8414 (0.8414) evaluator_time: 0.0031 (0.0031) time: 1.1206 data: 0.2739 max mem: 5231
Test: [100/235] eta: 0:01:53 model_time: 0.8063 (0.8252) evaluator_time: 0.0025 (0.0030) time: 0.8269 data: 0.0058 max mem: 5231
Test: [200/235] eta: 0:00:29 model_time: 0.7867 (0.8206) evaluator_time: 0.0023 (0.0032) time: 0.8130 data: 0.0063 max mem: 5231
Test: [234/235] eta: 0:00:00 model_time: 0.8047 (0.8205) evalua

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tor_time: 0.0022 (0.0031)  time: 0.8121  data: 0.0054  max mem: 523
1
Test: Total time: 0:03:15 (0.8325 s / it)
Averaged stats: model_time: 0.8047 (0.8205)  evaluator_time: 0.0022
(0.0031)
Accumulating evaluation results...
DONE (t=0.08s).
IoU metric: bbox
Average Precision  (AP) @[ IoU=0.50:0.95 | area=  all | maxDets=1
00 ] = 0.245
Average Precision  (AP) @[ IoU=0.50      | area=  all | maxDets=1
00 ] = 0.481
Average Precision  (AP) @[ IoU=0.75      | area=  all | maxDets=1
00 ] = 0.225
Average Precision  (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Precision  (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.116
Average Precision  (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.292
Average Recall     (AR) @[ IoU=0.50:0.95 | area=  all | maxDets=
1 ] = 0.210
Average Recall     (AR) @[ IoU=0.50:0.95 | area=  all | maxDets=
10 ] = 0.392
Average Recall     (AR) @[ IoU=0.50:0.95 | area=  all | maxDets=1
00 ] = 0.404
Average Recall     (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Recall     (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.219
Average Recall     (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.457
Epoch: [5] [ 0/235] eta: 0:08:37  lr: 0.000500  loss: 0.5343 (0.
5343)  loss_classifier: 0.0654 (0.0654)  loss_box_reg: 0.0777 (0.07
77)  loss_objectness: 0.1380 (0.1380)  loss_rpn_box_reg: 0.2533 (0.
2533)  time: 2.2014  data: 0.3027  max mem: 5231
Epoch: [5] [10/235] eta: 0:07:22  lr: 0.000500  loss: 0.3688 (0.
3441)  loss_classifier: 0.0487 (0.0508)  loss_box_reg: 0.0685 (0.07
32)  loss_objectness: 0.0550 (0.0624)  loss_rpn_box_reg: 0.1471 (0.
1577)  time: 1.9674  data: 0.0324  max mem: 5231
Epoch: [5] [20/235] eta: 0:07:13  lr: 0.000500  loss: 0.3688 (0.
3673)  loss_classifier: 0.0478 (0.0522)  loss_box_reg: 0.0685 (0.07
28)  loss_objectness: 0.0540 (0.0668)  loss_rpn_box_reg: 0.1526 (0.
1756)  time: 2.0072  data: 0.0051  max mem: 5231
Epoch: [5] [30/235] eta: 0:06:40  lr: 0.000500  loss: 0.3557 (0.
3641)  loss_classifier: 0.0531 (0.0555)  loss_box_reg: 0.0737 (0.07
60)  loss_objectness: 0.0639 (0.0695)  loss_rpn_box_reg: 0.1463 (0.
1631)  time: 1.9452  data: 0.0057  max mem: 5231
Epoch: [5] [40/235] eta: 0:06:17  lr: 0.000500  loss: 0.3446 (0.
3616)  loss_classifier: 0.0484 (0.0547)  loss_box_reg: 0.0698 (0.07
50)  loss_objectness: 0.0696 (0.0736)  loss_rpn_box_reg: 0.1286 (0.
1583)  time: 1.8498  data: 0.0064  max mem: 5231
Epoch: [5] [50/235] eta: 0:05:53  lr: 0.000500  loss: 0.3313 (0.
3560)  loss_classifier: 0.0484 (0.0546)  loss_box_reg: 0.0456 (0.07
26)  loss_objectness: 0.0717 (0.0728)  loss_rpn_box_reg: 0.1494 (0.
1560)  time: 1.8486  data: 0.0063  max mem: 5231
Epoch: [5] [60/235] eta: 0:05:38  lr: 0.000500  loss: 0.3313 (0.
3483)  loss_classifier: 0.0449 (0.0530)  loss_box_reg: 0.0459 (0.06
91)  loss_objectness: 0.0562 (0.0711)  loss_rpn_box_reg: 0.1370 (0.
1552)  time: 1.9377  data: 0.0063  max mem: 5231
Epoch: [5] [70/235] eta: 0:05:18  lr: 0.000500  loss: 0.3336 (0.
```

3490) loss_classifier: 0.0449 (0.0527) loss_box_reg: 0.0528 (0.0704) loss_objectness: 0.0562 (0.0698) loss_rpn_box_reg: 0.1496 (0.1560) time: 1.9793 data: 0.0062 max mem: 5231
Epoch: [5] [80/235] eta: 0:04:57 lr: 0.000500 loss: 0.3559 (0.3561) loss_classifier: 0.0548 (0.0537) loss_box_reg: 0.0757 (0.0732) loss_objectness: 0.0491 (0.0714) loss_rpn_box_reg: 0.1579 (0.1578) time: 1.8783 data: 0.0060 max mem: 5231
Epoch: [5] [90/235] eta: 0:04:37 lr: 0.000500 loss: 0.3430 (0.3565) loss_classifier: 0.0492 (0.0538) loss_box_reg: 0.0757 (0.0731) loss_objectness: 0.0572 (0.0719) loss_rpn_box_reg: 0.1698 (0.1576) time: 1.8528 data: 0.0061 max mem: 5231
Epoch: [5] [100/235] eta: 0:04:19 lr: 0.000500 loss: 0.3216 (0.3527) loss_classifier: 0.0493 (0.0538) loss_box_reg: 0.0589 (0.0724) loss_objectness: 0.0608 (0.0707) loss_rpn_box_reg: 0.1474 (0.1558) time: 1.9411 data: 0.0062 max mem: 5231
Epoch: [5] [110/235] eta: 0:04:01 lr: 0.000500 loss: 0.2750 (0.3467) loss_classifier: 0.0445 (0.0524) loss_box_reg: 0.0460 (0.0704) loss_objectness: 0.0502 (0.0691) loss_rpn_box_reg: 0.1260 (0.1547) time: 1.9971 data: 0.0061 max mem: 5231
Epoch: [5] [120/235] eta: 0:03:41 lr: 0.000500 loss: 0.3227 (0.3525) loss_classifier: 0.0416 (0.0531) loss_box_reg: 0.0557 (0.0720) loss_objectness: 0.0502 (0.0700) loss_rpn_box_reg: 0.1559 (0.1574) time: 1.9346 data: 0.0060 max mem: 5231
Epoch: [5] [130/235] eta: 0:03:22 lr: 0.000500 loss: 0.3344 (0.3510) loss_classifier: 0.0435 (0.0524) loss_box_reg: 0.0562 (0.0710) loss_objectness: 0.0530 (0.0687) loss_rpn_box_reg: 0.1727 (0.1589) time: 1.9315 data: 0.0060 max mem: 5231
Epoch: [5] [140/235] eta: 0:03:02 lr: 0.000500 loss: 0.3077 (0.3475) loss_classifier: 0.0350 (0.0518) loss_box_reg: 0.0470 (0.0701) loss_objectness: 0.0530 (0.0685) loss_rpn_box_reg: 0.1498 (0.1571) time: 1.9140 data: 0.0061 max mem: 5231
Epoch: [5] [150/235] eta: 0:02:43 lr: 0.000500 loss: 0.3493 (0.3510) loss_classifier: 0.0510 (0.0531) loss_box_reg: 0.0824 (0.0727) loss_objectness: 0.0504 (0.0675) loss_rpn_box_reg: 0.1447 (0.1576) time: 1.9242 data: 0.0065 max mem: 5231
Epoch: [5] [160/235] eta: 0:02:24 lr: 0.000500 loss: 0.3139 (0.3472) loss_classifier: 0.0496 (0.0526) loss_box_reg: 0.0680 (0.0721) loss_objectness: 0.0481 (0.0662) loss_rpn_box_reg: 0.1371 (0.1564) time: 1.9685 data: 0.0067 max mem: 5231
Epoch: [5] [170/235] eta: 0:02:05 lr: 0.000500 loss: 0.2755 (0.3459) loss_classifier: 0.0453 (0.0524) loss_box_reg: 0.0645 (0.0721) loss_objectness: 0.0498 (0.0658) loss_rpn_box_reg: 0.1293 (0.1556) time: 1.9830 data: 0.0062 max mem: 5231
Epoch: [5] [180/235] eta: 0:01:47 lr: 0.000500 loss: 0.3186 (0.3453) loss_classifier: 0.0406 (0.0518) loss_box_reg: 0.0692 (0.0719) loss_objectness: 0.0540 (0.0656) loss_rpn_box_reg: 0.1441 (0.1559) time: 2.1211 data: 0.0062 max mem: 5231
Epoch: [5] [190/235] eta: 0:01:27 lr: 0.000500 loss: 0.3181 (0.3431) loss_classifier: 0.0380 (0.0513) loss_box_reg: 0.0589 (0.0712) loss_objectness: 0.0504 (0.0650) loss_rpn_box_reg: 0.1491 (0.1556) time: 2.0650 data: 0.0065 max mem: 5231
Epoch: [5] [200/235] eta: 0:01:08 lr: 0.000500 loss: 0.3203 (0.3435) loss_classifier: 0.0425 (0.0517) loss_box_reg: 0.0566 (0.0716) loss_objectness: 0.0597 (0.0652) loss_rpn_box_reg: 0.1464 (0.1551) time: 1.8899 data: 0.0066 max mem: 5231
Epoch: [5] [210/235] eta: 0:00:48 lr: 0.000500 loss: 0.3203 (0.3405) loss_classifier: 0.0390 (0.0508) loss_box_reg: 0.0566 (0.0705) loss_objectness: 0.0597 (0.0645) loss_rpn_box_reg: 0.1273 (0.1547) time: 1.8978 data: 0.0064 max mem: 5231
Epoch: [5] [220/235] eta: 0:00:29 lr: 0.000500 loss: 0.3749 (0.3437) loss_classifier: 0.0369 (0.0509) loss_box_reg: 0.0601 (0.07

```
10) loss_objectness: 0.0576 (0.0655) loss_rpn_box_reg: 0.1590 (0.1563) time: 1.9429 data: 0.0063 max mem: 5231
Epoch: [5] [230/235] eta: 0:00:09 lr: 0.000500 loss: 0.3889 (0.3447) loss_classifier: 0.0519 (0.0510) loss_box_reg: 0.0615 (0.0710) loss_objectness: 0.0748 (0.0656) loss_rpn_box_reg: 0.1938 (0.1571) time: 2.0434 data: 0.0068 max mem: 5231
Epoch: [5] [234/235] eta: 0:00:01 lr: 0.000500 loss: 0.3404 (0.3434) loss_classifier: 0.0456 (0.0507) loss_box_reg: 0.0504 (0.0707) loss_objectness: 0.0585 (0.0653) loss_rpn_box_reg: 0.1590 (0.1567) time: 1.9119 data: 0.0067 max mem: 5231
Epoch: [5] Total time: 0:07:37 (1.9450 s / it)
creating index...
index created!
Test: [ 0/26] eta: 0:00:34 model_time: 1.0658 (1.0658) evaluator_time: 0.0035 (0.0035) time: 1.3206 data: 0.2486 max mem: 5231
Test: [25/26] eta: 0:00:00 model_time: 0.7580 (0.7760) evaluator_time: 0.0023 (0.0026) time: 0.7655 data: 0.0042 max mem: 5231
Test: Total time: 0:00:20 (0.7971 s / it)
Averaged stats: model_time: 0.7580 (0.7760) evaluator_time: 0.0023 (0.0026)
Accumulating evaluation results...
DONE (t=0.02s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.500
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.761
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.559
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.462
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.544
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.357
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.572
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.572
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.558
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.614
creating index...
index created!
Test: [ 0/235] eta: 0:04:21 model_time: 0.8800 (0.8800) evaluator_time: 0.0041 (0.0041) time: 1.1123 data: 0.2245 max mem: 5231
Test: [100/235] eta: 0:01:54 model_time: 0.8050 (0.8386) evaluator_time: 0.0026 (0.0032) time: 0.8277 data: 0.0059 max mem: 5231
Test: [200/235] eta: 0:00:29 model_time: 0.7950 (0.8274) evaluator_time: 0.0021 (0.0030) time: 0.8186 data: 0.0060 max mem: 5231
Test: [234/235] eta: 0:00:00 model_time: 0.7601 (0.8255) evaluator_time: 0.0025 (0.0031) time: 0.7831 data: 0.0056 max mem: 5231
```


Test: Total time: 0:03:16 (0.8373 s / it)
Averaged stats: model_time: 0.7601 (0.8255) evaluator_time: 0.0025 (0.0031)
Accumulating evaluation results...
DONE (t=0.08s).
IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 area= all maxDets=100] = 0.299
Average Precision (AP) @[IoU=0.50 area= all maxDets=100] = 0.551
Average Precision (AP) @[IoU=0.75 area= all maxDets=100] = 0.289
Average Precision (AP) @[IoU=0.50:0.95 area= small maxDets=100] = 0.000
Average Precision (AP) @[IoU=0.50:0.95 area=medium maxDets=100] = 0.268
Average Precision (AP) @[IoU=0.50:0.95 area= large maxDets=100] = 0.321
Average Recall (AR) @[IoU=0.50:0.95 area= all maxDets=1] = 0.215
Average Recall (AR) @[IoU=0.50:0.95 area= all maxDets=10] = 0.426
Average Recall (AR) @[IoU=0.50:0.95 area= all maxDets=100] = 0.449
Average Recall (AR) @[IoU=0.50:0.95 area= small maxDets=100] = 0.000
Average Recall (AR) @[IoU=0.50:0.95 area=medium maxDets=100] = 0.388
Average Recall (AR) @[IoU=0.50:0.95 area= large maxDets=100] = 0.473

Epoch: [6] [0/235] eta: 0:07:58 lr: 0.000050 loss: 0.2945 (0.2945) loss_classifier: 0.0235 (0.0235) loss_box_reg: 0.0232 (0.0232) loss_objectness: 0.0559 (0.0559) loss_rpn_box_reg: 0.1919 (0.1919) time: 2.0350 data: 0.2352 max mem: 5231
Epoch: [6] [10/235] eta: 0:07:28 lr: 0.000050 loss: 0.2945 (0.3571) loss_classifier: 0.0306 (0.0440) loss_box_reg: 0.0493 (0.0588) loss_objectness: 0.0500 (0.0755) loss_rpn_box_reg: 0.1650 (0.1788) time: 1.9924 data: 0.0286 max mem: 5231
Epoch: [6] [20/235] eta: 0:07:18 lr: 0.000050 loss: 0.3022 (0.3316) loss_classifier: 0.0359 (0.0451) loss_box_reg: 0.0443 (0.0601) loss_objectness: 0.0435 (0.0635) loss_rpn_box_reg: 0.1438 (0.1629) time: 2.0392 data: 0.0057 max mem: 5231
Epoch: [6] [30/235] eta: 0:06:44 lr: 0.000050 loss: 0.3414 (0.3589) loss_classifier: 0.0551 (0.0554) loss_box_reg: 0.0701 (0.0714) loss_objectness: 0.0584 (0.0702) loss_rpn_box_reg: 0.1396 (0.1618) time: 1.9639 data: 0.0047 max mem: 5231
Epoch: [6] [40/235] eta: 0:06:22 lr: 0.000050 loss: 0.3997 (0.3526) loss_classifier: 0.0539 (0.0531) loss_box_reg: 0.0803 (0.0736) loss_objectness: 0.0694 (0.0693) loss_rpn_box_reg: 0.1454 (0.1566) time: 1.8845 data: 0.0059 max mem: 5231
Epoch: [6] [50/235] eta: 0:06:05 lr: 0.000050 loss: 0.3259 (0.3498) loss_classifier: 0.0491 (0.0517) loss_box_reg: 0.0738 (0.0728) loss_objectness: 0.0626 (0.0694) loss_rpn_box_reg: 0.1454 (0.1559) time: 1.9763 data: 0.0059 max mem: 5231
Epoch: [6] [60/235] eta: 0:05:43 lr: 0.000050 loss: 0.3389 (0.3495) loss_classifier: 0.0458 (0.0513) loss_box_reg: 0.0481 (0.0700) loss_objectness: 0.0706 (0.0709) loss_rpn_box_reg: 0.1512 (0.1572) time: 1.9658 data: 0.0059 max mem: 5231
Epoch: [6] [70/235] eta: 0:05:24 lr: 0.000050 loss: 0.2984 (0.3462) loss_classifier: 0.0413 (0.0510) loss_box_reg: 0.0437 (0.0704) loss_objectness: 0.0646 (0.0689) loss_rpn_box_reg: 0.1401 (0.

1559) time: 1.9461 data: 0.0059 max mem: 5231
Epoch: [6] [80/235] eta: 0:05:05 lr: 0.000050 loss: 0.2910 (0.3419) loss_classifier: 0.0442 (0.0507) loss_box_reg: 0.0710 (0.0705) loss_objectness: 0.0457 (0.0665) loss_rpn_box_reg: 0.1151 (0.1542) time: 1.9902 data: 0.0063 max mem: 5231
Epoch: [6] [90/235] eta: 0:04:48 lr: 0.000050 loss: 0.3236 (0.3409) loss_classifier: 0.0491 (0.0509) loss_box_reg: 0.0721 (0.0714) loss_objectness: 0.0454 (0.0650) loss_rpn_box_reg: 0.1237 (0.1536) time: 2.0856 data: 0.0066 max mem: 5231
Epoch: [6] [100/235] eta: 0:04:26 lr: 0.000050 loss: 0.3207 (0.3362) loss_classifier: 0.0419 (0.0499) loss_box_reg: 0.0663 (0.0703) loss_objectness: 0.0443 (0.0644) loss_rpn_box_reg: 0.1251 (0.1516) time: 1.9921 data: 0.0063 max mem: 5231
Epoch: [6] [110/235] eta: 0:04:06 lr: 0.000050 loss: 0.3006 (0.3348) loss_classifier: 0.0408 (0.0501) loss_box_reg: 0.0582 (0.0701) loss_objectness: 0.0513 (0.0635) loss_rpn_box_reg: 0.1251 (0.1512) time: 1.8879 data: 0.0066 max mem: 5231
Epoch: [6] [120/235] eta: 0:03:47 lr: 0.000050 loss: 0.3137 (0.3330) loss_classifier: 0.0469 (0.0499) loss_box_reg: 0.0608 (0.0697) loss_objectness: 0.0480 (0.0627) loss_rpn_box_reg: 0.1404 (0.1508) time: 1.9772 data: 0.0066 max mem: 5231
Epoch: [6] [130/235] eta: 0:03:26 lr: 0.000050 loss: 0.2839 (0.3301) loss_classifier: 0.0402 (0.0491) loss_box_reg: 0.0518 (0.0690) loss_objectness: 0.0445 (0.0627) loss_rpn_box_reg: 0.1202 (0.1493) time: 1.9513 data: 0.0062 max mem: 5231
Epoch: [6] [140/235] eta: 0:03:06 lr: 0.000050 loss: 0.2822 (0.3302) loss_classifier: 0.0397 (0.0490) loss_box_reg: 0.0526 (0.0688) loss_objectness: 0.0550 (0.0626) loss_rpn_box_reg: 0.1139 (0.1498) time: 1.8849 data: 0.0061 max mem: 5231
Epoch: [6] [150/235] eta: 0:02:47 lr: 0.000050 loss: 0.3168 (0.3308) loss_classifier: 0.0456 (0.0489) loss_box_reg: 0.0566 (0.0689) loss_objectness: 0.0602 (0.0629) loss_rpn_box_reg: 0.1273 (0.1501) time: 1.9596 data: 0.0061 max mem: 5231
Epoch: [6] [160/235] eta: 0:02:27 lr: 0.000050 loss: 0.3144 (0.3292) loss_classifier: 0.0411 (0.0485) loss_box_reg: 0.0527 (0.0687) loss_objectness: 0.0567 (0.0620) loss_rpn_box_reg: 0.1258 (0.1500) time: 1.9762 data: 0.0060 max mem: 5231
Epoch: [6] [170/235] eta: 0:02:07 lr: 0.000050 loss: 0.2909 (0.3274) loss_classifier: 0.0423 (0.0484) loss_box_reg: 0.0484 (0.0679) loss_objectness: 0.0594 (0.0623) loss_rpn_box_reg: 0.1274 (0.1489) time: 1.8857 data: 0.0060 max mem: 5231
Epoch: [6] [180/235] eta: 0:01:47 lr: 0.000050 loss: 0.2909 (0.3262) loss_classifier: 0.0462 (0.0488) loss_box_reg: 0.0485 (0.0676) loss_objectness: 0.0607 (0.0619) loss_rpn_box_reg: 0.1225 (0.1479) time: 1.8656 data: 0.0060 max mem: 5231
Epoch: [6] [190/235] eta: 0:01:27 lr: 0.000050 loss: 0.2668 (0.3249) loss_classifier: 0.0405 (0.0482) loss_box_reg: 0.0509 (0.0671) loss_objectness: 0.0500 (0.0614) loss_rpn_box_reg: 0.1225 (0.1481) time: 1.8803 data: 0.0059 max mem: 5231
Epoch: [6] [200/235] eta: 0:01:08 lr: 0.000050 loss: 0.2596 (0.3250) loss_classifier: 0.0405 (0.0484) loss_box_reg: 0.0509 (0.0673) loss_objectness: 0.0554 (0.0617) loss_rpn_box_reg: 0.1196 (0.1475) time: 1.9025 data: 0.0062 max mem: 5231
Epoch: [6] [210/235] eta: 0:00:48 lr: 0.000050 loss: 0.3410 (0.3281) loss_classifier: 0.0442 (0.0489) loss_box_reg: 0.0574 (0.0684) loss_objectness: 0.0654 (0.0626) loss_rpn_box_reg: 0.1330 (0.1482) time: 2.0245 data: 0.0062 max mem: 5231
Epoch: [6] [220/235] eta: 0:00:29 lr: 0.000050 loss: 0.3318 (0.3279) loss_classifier: 0.0428 (0.0491) loss_box_reg: 0.0867 (0.0692) loss_objectness: 0.0601 (0.0621) loss_rpn_box_reg: 0.1355 (0.1475) time: 2.0013 data: 0.0060 max mem: 5231

Epoch: [6] [230/235] eta: 0:00:09 lr: 0.000050 loss: 0.2894 (0.3253) loss_classifier: 0.0416 (0.0486) loss_box_reg: 0.0653 (0.0686) loss_objectness: 0.0450 (0.0616) loss_rpn_box_reg: 0.1166 (0.1464) time: 1.9229 data: 0.0060 max mem: 5231

Epoch: [6] [234/235] eta: 0:00:01 lr: 0.000050 loss: 0.2731 (0.3237) loss_classifier: 0.0416 (0.0484) loss_box_reg: 0.0592 (0.0684) loss_objectness: 0.0452 (0.0614) loss_rpn_box_reg: 0.1136 (0.1455) time: 1.8896 data: 0.0059 max mem: 5231

Epoch: [6] Total time: 0:07:38 (1.9499 s / it)

creating index...

index created!

Test: [0/26] eta: 0:00:34 model_time: 1.0924 (1.0924) evaluator_time: 0.0034 (0.0034) time: 1.3364 data: 0.2372 max mem: 5231

Test: [25/26] eta: 0:00:00 model_time: 0.7570 (0.7779) evaluator_time: 0.0021 (0.0025) time: 0.7665 data: 0.0051 max mem: 5231

Test: Total time: 0:00:20 (0.7978 s / it)

Averaged stats: model_time: 0.7570 (0.7779) evaluator_time: 0.0021 (0.0025)

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

Average Precision	(AP) @[IoU=0.50:0.95 area=	all maxDets=1
00]	= 0.502	
Average Precision	(AP) @[IoU=0.50 area=	all maxDets=1
00]	= 0.763	
Average Precision	(AP) @[IoU=0.75 area=	all maxDets=1
00]	= 0.565	
Average Precision	(AP) @[IoU=0.50:0.95 area=	small maxDets=1
00]	= 0.000	
Average Precision	(AP) @[IoU=0.50:0.95 area=	medium maxDets=1
00]	= 0.477	
Average Precision	(AP) @[IoU=0.50:0.95 area=	large maxDets=1
00]	= 0.544	
Average Recall	(AR) @[IoU=0.50:0.95 area=	all maxDets=
1]	= 0.360	
Average Recall	(AR) @[IoU=0.50:0.95 area=	all maxDets=
10]	= 0.570	
Average Recall	(AR) @[IoU=0.50:0.95 area=	all maxDets=1
00]	= 0.570	
Average Recall	(AR) @[IoU=0.50:0.95 area=	small maxDets=1
00]	= 0.000	
Average Recall	(AR) @[IoU=0.50:0.95 area=	medium maxDets=1
00]	= 0.542	
Average Recall	(AR) @[IoU=0.50:0.95 area=	large maxDets=1
00]	= 0.614	

creating index...

index created!

Test: [0/235] eta: 0:04:20 model_time: 0.8860 (0.8860) evaluator_time: 0.0039 (0.0039) time: 1.1093 data: 0.2175 max mem: 5231

Test: [100/235] eta: 0:01:55 model_time: 0.8076 (0.8425) evaluator_time: 0.0022 (0.0031) time: 0.8442 data: 0.0057 max mem: 5231

Test: [200/235] eta: 0:00:29 model_time: 0.7972 (0.8324) evaluator_time: 0.0024 (0.0032) time: 0.8412 data: 0.0059 max mem: 5231

Test: [234/235] eta: 0:00:00 model_time: 0.7958 (0.8286) evaluator_time: 0.0022 (0.0031) time: 0.8065 data: 0.0056 max mem: 5231

Test: Total time: 0:03:17 (0.8401 s / it)

Averaged stats: model_time: 0.7958 (0.8286) evaluator_time: 0.0022

(0.0031)

Accumulating evaluation results...

DONE (t=0.08s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.284

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.533

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.278

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.222

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.312

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.222

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.419

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.431

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.307

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.474

Epoch: [7] [0/235] eta: 0:07:53 lr: 0.000050 loss: 0.2444 (0.2444) loss_classifier: 0.0423 (0.0423) loss_box_reg: 0.0771 (0.0771) loss_objectness: 0.0252 (0.0252) loss_rpn_box_reg: 0.0997 (0.0997) time: 2.0137 data: 0.2471 max mem: 5231

Epoch: [7] [10/235] eta: 0:07:21 lr: 0.000050 loss: 0.2709 (0.2957) loss_classifier: 0.0423 (0.0400) loss_box_reg: 0.0617 (0.0589) loss_objectness: 0.0310 (0.0500) loss_rpn_box_reg: 0.1362 (0.1468) time: 1.9603 data: 0.0296 max mem: 5231

Epoch: [7] [20/235] eta: 0:07:04 lr: 0.000050 loss: 0.2698 (0.2950) loss_classifier: 0.0405 (0.0438) loss_box_reg: 0.0426 (0.0562) loss_objectness: 0.0367 (0.0509) loss_rpn_box_reg: 0.1362 (0.1440) time: 1.9737 data: 0.0056 max mem: 5231

Epoch: [7] [30/235] eta: 0:06:47 lr: 0.000050 loss: 0.2724 (0.3031) loss_classifier: 0.0405 (0.0439) loss_box_reg: 0.0453 (0.0581) loss_objectness: 0.0464 (0.0543) loss_rpn_box_reg: 0.1494 (0.1469) time: 2.0050 data: 0.0047 max mem: 5231

Epoch: [7] [40/235] eta: 0:06:24 lr: 0.000050 loss: 0.2964 (0.3068) loss_classifier: 0.0408 (0.0460) loss_box_reg: 0.0523 (0.0649) loss_objectness: 0.0552 (0.0557) loss_rpn_box_reg: 0.1467 (0.1402) time: 1.9712 data: 0.0077 max mem: 5231

Epoch: [7] [50/235] eta: 0:06:02 lr: 0.000050 loss: 0.3528 (0.3205) loss_classifier: 0.0489 (0.0501) loss_box_reg: 0.0561 (0.0693) loss_objectness: 0.0577 (0.0571) loss_rpn_box_reg: 0.1111 (0.1439) time: 1.9132 data: 0.0077 max mem: 5231

Epoch: [7] [60/235] eta: 0:05:43 lr: 0.000050 loss: 0.3528 (0.3182) loss_classifier: 0.0425 (0.0488) loss_box_reg: 0.0560 (0.0681) loss_objectness: 0.0594 (0.0573) loss_rpn_box_reg: 0.1272 (0.1440) time: 1.9413 data: 0.0059 max mem: 5231

Epoch: [7] [70/235] eta: 0:05:24 lr: 0.000050 loss: 0.2889 (0.3134) loss_classifier: 0.0353 (0.0475) loss_box_reg: 0.0513 (0.0656) loss_objectness: 0.0498 (0.0566) loss_rpn_box_reg: 0.1272 (0.1437) time: 1.9939 data: 0.0062 max mem: 5231

Epoch: [7] [80/235] eta: 0:05:05 lr: 0.000050 loss: 0.3306 (0.

3195) loss_classifier: 0.0446 (0.0493) loss_box_reg: 0.0541 (0.0679) loss_objectness: 0.0569 (0.0576) loss_rpn_box_reg: 0.1306 (0.1447) time: 1.9943 data: 0.0063 max mem: 5231
Epoch: [7] [90/235] eta: 0:04:43 lr: 0.000050 loss: 0.3401 (0.3168) loss_classifier: 0.0497 (0.0489) loss_box_reg: 0.0650 (0.0678) loss_objectness: 0.0585 (0.0581) loss_rpn_box_reg: 0.1306 (0.1421) time: 1.9135 data: 0.0062 max mem: 5231
Epoch: [7] [100/235] eta: 0:04:24 lr: 0.000050 loss: 0.2992 (0.3180) loss_classifier: 0.0330 (0.0486) loss_box_reg: 0.0563 (0.0675) loss_objectness: 0.0521 (0.0578) loss_rpn_box_reg: 0.1405 (0.1442) time: 1.9241 data: 0.0060 max mem: 5231
Epoch: [7] [110/235] eta: 0:04:03 lr: 0.000050 loss: 0.3457 (0.3202) loss_classifier: 0.0339 (0.0480) loss_box_reg: 0.0564 (0.0666) loss_objectness: 0.0548 (0.0586) loss_rpn_box_reg: 0.1597 (0.1471) time: 1.8903 data: 0.0061 max mem: 5231
Epoch: [7] [120/235] eta: 0:03:42 lr: 0.000050 loss: 0.3231 (0.3195) loss_classifier: 0.0361 (0.0477) loss_box_reg: 0.0564 (0.0672) loss_objectness: 0.0639 (0.0595) loss_rpn_box_reg: 0.1291 (0.1451) time: 1.8130 data: 0.0062 max mem: 5231
Epoch: [7] [130/235] eta: 0:03:22 lr: 0.000050 loss: 0.3231 (0.3212) loss_classifier: 0.0361 (0.0479) loss_box_reg: 0.0610 (0.0673) loss_objectness: 0.0535 (0.0596) loss_rpn_box_reg: 0.1345 (0.1464) time: 1.8376 data: 0.0061 max mem: 5231
Epoch: [7] [140/235] eta: 0:03:04 lr: 0.000050 loss: 0.3495 (0.3229) loss_classifier: 0.0488 (0.0490) loss_box_reg: 0.0667 (0.0690) loss_objectness: 0.0505 (0.0591) loss_rpn_box_reg: 0.1431 (0.1457) time: 1.9604 data: 0.0064 max mem: 5232
Epoch: [7] [150/235] eta: 0:02:44 lr: 0.000050 loss: 0.3248 (0.3220) loss_classifier: 0.0442 (0.0484) loss_box_reg: 0.0645 (0.0682) loss_objectness: 0.0459 (0.0599) loss_rpn_box_reg: 0.1227 (0.1455) time: 2.0070 data: 0.0064 max mem: 5232
Epoch: [7] [160/235] eta: 0:02:24 lr: 0.000050 loss: 0.2713 (0.3221) loss_classifier: 0.0432 (0.0484) loss_box_reg: 0.0568 (0.0683) loss_objectness: 0.0578 (0.0606) loss_rpn_box_reg: 0.1187 (0.1448) time: 1.8616 data: 0.0060 max mem: 5232
Epoch: [7] [170/235] eta: 0:02:05 lr: 0.000050 loss: 0.3271 (0.3230) loss_classifier: 0.0449 (0.0484) loss_box_reg: 0.0525 (0.0678) loss_objectness: 0.0578 (0.0608) loss_rpn_box_reg: 0.1256 (0.1460) time: 1.9130 data: 0.0061 max mem: 5232
Epoch: [7] [180/235] eta: 0:01:47 lr: 0.000050 loss: 0.3291 (0.3229) loss_classifier: 0.0435 (0.0483) loss_box_reg: 0.0521 (0.0678) loss_objectness: 0.0537 (0.0610) loss_rpn_box_reg: 0.1421 (0.1457) time: 2.0697 data: 0.0063 max mem: 5232
Epoch: [7] [190/235] eta: 0:01:27 lr: 0.000050 loss: 0.2881 (0.3211) loss_classifier: 0.0365 (0.0479) loss_box_reg: 0.0455 (0.0675) loss_objectness: 0.0493 (0.0605) loss_rpn_box_reg: 0.1437 (0.1453) time: 2.0958 data: 0.0062 max mem: 5232
Epoch: [7] [200/235] eta: 0:01:08 lr: 0.000050 loss: 0.2674 (0.3206) loss_classifier: 0.0340 (0.0476) loss_box_reg: 0.0457 (0.0676) loss_objectness: 0.0486 (0.0603) loss_rpn_box_reg: 0.1437 (0.1451) time: 2.0603 data: 0.0061 max mem: 5232
Epoch: [7] [210/235] eta: 0:00:48 lr: 0.000050 loss: 0.2904 (0.3205) loss_classifier: 0.0367 (0.0475) loss_box_reg: 0.0583 (0.0674) loss_objectness: 0.0486 (0.0601) loss_rpn_box_reg: 0.1485 (0.1456) time: 1.9746 data: 0.0061 max mem: 5232
Epoch: [7] [220/235] eta: 0:00:29 lr: 0.000050 loss: 0.3289 (0.3213) loss_classifier: 0.0431 (0.0478) loss_box_reg: 0.0539 (0.0678) loss_objectness: 0.0474 (0.0599) loss_rpn_box_reg: 0.1501 (0.1458) time: 1.9150 data: 0.0060 max mem: 5232
Epoch: [7] [230/235] eta: 0:00:09 lr: 0.000050 loss: 0.3472 (0.3222) loss_classifier: 0.0490 (0.0483) loss_box_reg: 0.0678 (0.06

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92) loss_objectness: 0.0571 (0.0599) loss_rpn_box_reg: 0.1177 (0.
1449) time: 1.9205 data: 0.0060 max mem: 5232
Epoch: [7] [234/235] eta: 0:00:01 lr: 0.000050 loss: 0.2959 (0.
3211) loss_classifier: 0.0421 (0.0481) loss_box_reg: 0.0648 (0.06
91) loss_objectness: 0.0451 (0.0595) loss_rpn_box_reg: 0.1177 (0.
1445) time: 1.8748 data: 0.0058 max mem: 5232
Epoch: [7] Total time: 0:07:38 (1.9495 s / it)
creating index...
index created!
Test: [ 0/26] eta: 0:00:34 model_time: 1.0705 (1.0705) evaluato
r_time: 0.0027 (0.0027) time: 1.3282 data: 0.2516 max mem: 5232
Test: [25/26] eta: 0:00:00 model_time: 0.7554 (0.7744) evaluato
r_time: 0.0021 (0.0026) time: 0.7608 data: 0.0037 max mem: 5232
Test: Total time: 0:00:20 (0.7951 s / it)
Averaged stats: model_time: 0.7554 (0.7744) evaluator_time: 0.0021
(0.0026)
Accumulating evaluation results...
DONE (t=0.02s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.502
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.766
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.532
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.440
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.555
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.362
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.570
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.570
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.512
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.622
creating index...
index created!
Test: [ 0/235] eta: 0:04:53 model_time: 1.0337 (1.0337) evalua
tor_time: 0.0036 (0.0036) time: 1.2474 data: 0.2068 max mem: 523
2
Test: [100/235] eta: 0:01:54 model_time: 0.8132 (0.8339) evalua
tor_time: 0.0022 (0.0032) time: 0.8616 data: 0.0057 max mem: 523
2
Test: [200/235] eta: 0:00:29 model_time: 0.8066 (0.8331) evalua
tor_time: 0.0025 (0.0029) time: 0.8219 data: 0.0058 max mem: 523
2
Test: [234/235] eta: 0:00:00 model_time: 0.8041 (0.8272) evalua
tor_time: 0.0025 (0.0031) time: 0.8060 data: 0.0056 max mem: 523
2
Test: Total time: 0:03:17 (0.8396 s / it)
Averaged stats: model_time: 0.8041 (0.8272) evaluator_time: 0.0025
(0.0031)
Accumulating evaluation results...

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DONE (t=0.08s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.248
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.480
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.232
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.215
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.270
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.214
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.407
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.422
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.315
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.456
Epoch: [8] [ 0/235] eta: 0:08:04 lr: 0.000050 loss: 0.2369 (0.
2369) loss_classifier: 0.0565 (0.0565) loss_box_reg: 0.0634 (0.06
34) loss_objectness: 0.0371 (0.0371) loss_rpn_box_reg: 0.0798 (0.
0798) time: 2.0615 data: 0.3089 max mem: 5232
Epoch: [8] [ 10/235] eta: 0:08:03 lr: 0.000050 loss: 0.2422 (0.
2696) loss_classifier: 0.0404 (0.0424) loss_box_reg: 0.0496 (0.05
78) loss_objectness: 0.0425 (0.0471) loss_rpn_box_reg: 0.0922 (0.
1222) time: 2.1500 data: 0.0342 max mem: 5232
Epoch: [8] [ 20/235] eta: 0:07:14 lr: 0.000050 loss: 0.3362 (0.
3185) loss_classifier: 0.0404 (0.0484) loss_box_reg: 0.0528 (0.06
78) loss_objectness: 0.0483 (0.0584) loss_rpn_box_reg: 0.1358 (0.
1440) time: 2.0193 data: 0.0053 max mem: 5232
Epoch: [8] [ 30/235] eta: 0:06:53 lr: 0.000050 loss: 0.3334 (0.
3183) loss_classifier: 0.0446 (0.0501) loss_box_reg: 0.0628 (0.07
09) loss_objectness: 0.0588 (0.0595) loss_rpn_box_reg: 0.1358 (0.
1378) time: 1.9426 data: 0.0053 max mem: 5232
Epoch: [8] [ 40/235] eta: 0:06:23 lr: 0.000050 loss: 0.3334 (0.
3388) loss_classifier: 0.0474 (0.0519) loss_box_reg: 0.0628 (0.07
52) loss_objectness: 0.0602 (0.0683) loss_rpn_box_reg: 0.1368 (0.
1433) time: 1.9106 data: 0.0064 max mem: 5232
Epoch: [8] [ 50/235] eta: 0:06:09 lr: 0.000050 loss: 0.3054 (0.
3273) loss_classifier: 0.0388 (0.0493) loss_box_reg: 0.0583 (0.07
04) loss_objectness: 0.0630 (0.0655) loss_rpn_box_reg: 0.1393 (0.
1421) time: 1.9719 data: 0.0060 max mem: 5232
Epoch: [8] [ 60/235] eta: 0:05:47 lr: 0.000050 loss: 0.2523 (0.
3195) loss_classifier: 0.0385 (0.0478) loss_box_reg: 0.0372 (0.06
87) loss_objectness: 0.0368 (0.0624) loss_rpn_box_reg: 0.1283 (0.
1406) time: 2.0315 data: 0.0059 max mem: 5232
Epoch: [8] [ 70/235] eta: 0:05:28 lr: 0.000050 loss: 0.2582 (0.
3206) loss_classifier: 0.0354 (0.0467) loss_box_reg: 0.0419 (0.06
66) loss_objectness: 0.0412 (0.0620) loss_rpn_box_reg: 0.1417 (0.
1453) time: 1.9611 data: 0.0060 max mem: 5232
Epoch: [8] [ 80/235] eta: 0:05:08 lr: 0.000050 loss: 0.3058 (0.
3189) loss_classifier: 0.0355 (0.0465) loss_box_reg: 0.0467 (0.06
64) loss_objectness: 0.0431 (0.0603) loss_rpn_box_reg: 0.1507 (0.
```

1456) time: 1.9958 data: 0.0059 max mem: 5232
Epoch: [8] [90/235] eta: 0:04:51 lr: 0.000050 loss: 0.3083 (0.3174) loss_classifier: 0.0364 (0.0460) loss_box_reg: 0.0643 (0.0668) loss_objectness: 0.0466 (0.0592) loss_rpn_box_reg: 0.1275 (0.1455) time: 2.0828 data: 0.0059 max mem: 5232
Epoch: [8] [100/235] eta: 0:04:31 lr: 0.000050 loss: 0.3083 (0.3190) loss_classifier: 0.0378 (0.0460) loss_box_reg: 0.0725 (0.0679) loss_objectness: 0.0489 (0.0598) loss_rpn_box_reg: 0.1385 (0.1454) time: 2.0937 data: 0.0060 max mem: 5232
Epoch: [8] [110/235] eta: 0:04:09 lr: 0.000050 loss: 0.2796 (0.3189) loss_classifier: 0.0448 (0.0463) loss_box_reg: 0.0606 (0.0675) loss_objectness: 0.0568 (0.0601) loss_rpn_box_reg: 0.1263 (0.1450) time: 1.9255 data: 0.0059 max mem: 5232
Epoch: [8] [120/235] eta: 0:03:49 lr: 0.000050 loss: 0.3423 (0.3241) loss_classifier: 0.0576 (0.0474) loss_box_reg: 0.0707 (0.0691) loss_objectness: 0.0568 (0.0606) loss_rpn_box_reg: 0.1429 (0.1470) time: 1.8971 data: 0.0059 max mem: 5232
Epoch: [8] [130/235] eta: 0:03:28 lr: 0.000050 loss: 0.3291 (0.3212) loss_classifier: 0.0464 (0.0471) loss_box_reg: 0.0645 (0.0686) loss_objectness: 0.0553 (0.0600) loss_rpn_box_reg: 0.1357 (0.1456) time: 1.9659 data: 0.0063 max mem: 5232
Epoch: [8] [140/235] eta: 0:03:08 lr: 0.000050 loss: 0.2764 (0.3198) loss_classifier: 0.0391 (0.0466) loss_box_reg: 0.0597 (0.0680) loss_objectness: 0.0405 (0.0595) loss_rpn_box_reg: 0.1167 (0.1458) time: 1.9304 data: 0.0063 max mem: 5232
Epoch: [8] [150/235] eta: 0:02:47 lr: 0.000050 loss: 0.2777 (0.3200) loss_classifier: 0.0392 (0.0471) loss_box_reg: 0.0571 (0.0685) loss_objectness: 0.0412 (0.0595) loss_rpn_box_reg: 0.1129 (0.1449) time: 1.8589 data: 0.0061 max mem: 5232
Epoch: [8] [160/235] eta: 0:02:27 lr: 0.000050 loss: 0.3396 (0.3217) loss_classifier: 0.0527 (0.0479) loss_box_reg: 0.0578 (0.0687) loss_objectness: 0.0555 (0.0598) loss_rpn_box_reg: 0.1149 (0.1453) time: 1.8484 data: 0.0063 max mem: 5232
Epoch: [8] [170/235] eta: 0:02:07 lr: 0.000050 loss: 0.3222 (0.3214) loss_classifier: 0.0527 (0.0479) loss_box_reg: 0.0719 (0.0692) loss_objectness: 0.0583 (0.0601) loss_rpn_box_reg: 0.1107 (0.1442) time: 1.8666 data: 0.0061 max mem: 5232
Epoch: [8] [180/235] eta: 0:01:47 lr: 0.000050 loss: 0.2816 (0.3200) loss_classifier: 0.0428 (0.0481) loss_box_reg: 0.0685 (0.0688) loss_objectness: 0.0454 (0.0594) loss_rpn_box_reg: 0.1107 (0.1438) time: 1.8421 data: 0.0060 max mem: 5232
Epoch: [8] [190/235] eta: 0:01:28 lr: 0.000050 loss: 0.2850 (0.3193) loss_classifier: 0.0452 (0.0481) loss_box_reg: 0.0492 (0.0686) loss_objectness: 0.0365 (0.0587) loss_rpn_box_reg: 0.1175 (0.1439) time: 1.9661 data: 0.0059 max mem: 5232
Epoch: [8] [200/235] eta: 0:01:08 lr: 0.000050 loss: 0.2886 (0.3202) loss_classifier: 0.0452 (0.0481) loss_box_reg: 0.0492 (0.0691) loss_objectness: 0.0474 (0.0589) loss_rpn_box_reg: 0.1432 (0.1440) time: 2.0002 data: 0.0059 max mem: 5232
Epoch: [8] [210/235] eta: 0:00:48 lr: 0.000050 loss: 0.3264 (0.3210) loss_classifier: 0.0398 (0.0481) loss_box_reg: 0.0603 (0.0692) loss_objectness: 0.0654 (0.0600) loss_rpn_box_reg: 0.1251 (0.1437) time: 1.8708 data: 0.0061 max mem: 5232
Epoch: [8] [220/235] eta: 0:00:29 lr: 0.000050 loss: 0.3317 (0.3221) loss_classifier: 0.0604 (0.0488) loss_box_reg: 0.0803 (0.0698) loss_objectness: 0.0617 (0.0603) loss_rpn_box_reg: 0.1246 (0.1432) time: 1.9265 data: 0.0060 max mem: 5232
Epoch: [8] [230/235] eta: 0:00:09 lr: 0.000050 loss: 0.2968 (0.3195) loss_classifier: 0.0437 (0.0480) loss_box_reg: 0.0475 (0.0684) loss_objectness: 0.0451 (0.0598) loss_rpn_box_reg: 0.1246 (0.1432) time: 1.9626 data: 0.0060 max mem: 5232

Epoch: [8] [234/235] eta: 0:00:01 lr: 0.000050 loss: 0.2861 (0.3194) loss_classifier: 0.0437 (0.0479) loss_box_reg: 0.0511 (0.0684) loss_objectness: 0.0402 (0.0597) loss_rpn_box_reg: 0.1186 (0.1434) time: 1.8726 data: 0.0059 max mem: 5232
Epoch: [8] Total time: 0:07:37 (1.9464 s / it)
creating index...
index created!
Test: [0/26] eta: 0:00:34 model_time: 1.0504 (1.0504) evaluator_time: 0.0026 (0.0026) time: 1.3079 data: 0.2523 max mem: 5232
Test: [25/26] eta: 0:00:00 model_time: 0.7582 (0.7752) evaluator_time: 0.0019 (0.0025) time: 0.7644 data: 0.0043 max mem: 5232
Test: Total time: 0:00:20 (0.7955 s / it)
Averaged stats: model_time: 0.7582 (0.7752) evaluator_time: 0.0019 (0.0025)
Accumulating evaluation results...
DONE (t=0.02s).
IoU metric: bbox
Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.494
Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.762
Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.525
Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000
Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.437
Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.547
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.360
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.569
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.569
Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000
Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.512
Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.620
creating index...
index created!
Test: [0/235] eta: 0:04:23 model_time: 0.8713 (0.8713) evaluator_time: 0.0036 (0.0036) time: 1.1201 data: 0.2430 max mem: 5232
Test: [100/235] eta: 0:01:54 model_time: 0.8035 (0.8358) evaluator_time: 0.0024 (0.0031) time: 0.8518 data: 0.0059 max mem: 5232
Test: [200/235] eta: 0:00:29 model_time: 0.8103 (0.8276) evaluator_time: 0.0022 (0.0030) time: 0.8615 data: 0.0058 max mem: 5232
Test: [234/235] eta: 0:00:00 model_time: 0.7638 (0.8241) evaluator_time: 0.0023 (0.0031) time: 0.7886 data: 0.0059 max mem: 5232
Test: Total time: 0:03:16 (0.8358 s / it)
Averaged stats: model_time: 0.7638 (0.8241) evaluator_time: 0.0023 (0.0031)
Accumulating evaluation results...
DONE (t=0.08s).
IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.260
Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.499
Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.255
Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000
Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.192
Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.291
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.225
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.416
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.424
Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000
Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.290
Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.468
Epoch: [9] [0/235] eta: 0:11:35 lr: 0.000005 loss: 0.3252 (0.3252) loss_classifier: 0.0349 (0.0349) loss_box_reg: 0.0233 (0.0233) loss_objectness: 0.0178 (0.0178) loss_rpn_box_reg: 0.2492 (0.2492) time: 2.9591 data: 0.2904 max mem: 5232
Epoch: [9] [10/235] eta: 0:07:35 lr: 0.000005 loss: 0.3039 (0.3158) loss_classifier: 0.0377 (0.0471) loss_box_reg: 0.0686 (0.0653) loss_objectness: 0.0560 (0.0554) loss_rpn_box_reg: 0.1324 (0.1480) time: 2.0256 data: 0.0313 max mem: 5232
Epoch: [9] [20/235] eta: 0:07:14 lr: 0.000005 loss: 0.2927 (0.3015) loss_classifier: 0.0377 (0.0434) loss_box_reg: 0.0684 (0.0629) loss_objectness: 0.0473 (0.0499) loss_rpn_box_reg: 0.1220 (0.1454) time: 1.9739 data: 0.0047 max mem: 5232
Epoch: [9] [30/235] eta: 0:06:46 lr: 0.000005 loss: 0.3011 (0.3046) loss_classifier: 0.0310 (0.0412) loss_box_reg: 0.0437 (0.0588) loss_objectness: 0.0473 (0.0538) loss_rpn_box_reg: 0.1607 (0.1508) time: 1.9570 data: 0.0059 max mem: 5232
Epoch: [9] [40/235] eta: 0:06:22 lr: 0.000005 loss: 0.3038 (0.3023) loss_classifier: 0.0315 (0.0411) loss_box_reg: 0.0437 (0.0598) loss_objectness: 0.0629 (0.0564) loss_rpn_box_reg: 0.1411 (0.1450) time: 1.8950 data: 0.0069 max mem: 5232
Epoch: [9] [50/235] eta: 0:05:55 lr: 0.000005 loss: 0.2740 (0.3023) loss_classifier: 0.0348 (0.0422) loss_box_reg: 0.0563 (0.0614) loss_objectness: 0.0482 (0.0569) loss_rpn_box_reg: 0.1129 (0.1418) time: 1.8274 data: 0.0061 max mem: 5232
Epoch: [9] [60/235] eta: 0:05:38 lr: 0.000005 loss: 0.3141 (0.3091) loss_classifier: 0.0503 (0.0452) loss_box_reg: 0.0633 (0.0637) loss_objectness: 0.0517 (0.0567) loss_rpn_box_reg: 0.1234 (0.1434) time: 1.8901 data: 0.0060 max mem: 5232
Epoch: [9] [70/235] eta: 0:05:16 lr: 0.000005 loss: 0.3445 (0.3183) loss_classifier: 0.0483 (0.0467) loss_box_reg: 0.0635 (0.0663) loss_objectness: 0.0591 (0.0600) loss_rpn_box_reg: 0.1273 (0.1454) time: 1.9111 data: 0.0060 max mem: 5232
Epoch: [9] [80/235] eta: 0:04:55 lr: 0.000005 loss: 0.3411 (0.3167) loss_classifier: 0.0461 (0.0464) loss_box_reg: 0.0644 (0.0659) loss_objectness: 0.0688 (0.0599) loss_rpn_box_reg: 0.1301 (0.1445) time: 1.8103 data: 0.0060 max mem: 5232
Epoch: [9] [90/235] eta: 0:04:36 lr: 0.000005 loss: 0.2942 (0.

3152) loss_classifier: 0.0353 (0.0452) loss_box_reg: 0.0430 (0.0634) loss_objectness: 0.0471 (0.0596) loss_rpn_box_reg: 0.1455 (0.1469) time: 1.8778 data: 0.0060 max mem: 5232
Epoch: [9] [100/235] eta: 0:04:17 lr: 0.000005 loss: 0.2617 (0.3124) loss_classifier: 0.0333 (0.0450) loss_box_reg: 0.0416 (0.0643) loss_objectness: 0.0430 (0.0588) loss_rpn_box_reg: 0.1402 (0.1443) time: 1.9234 data: 0.0060 max mem: 5232
Epoch: [9] [110/235] eta: 0:04:01 lr: 0.000005 loss: 0.3012 (0.3147) loss_classifier: 0.0334 (0.0443) loss_box_reg: 0.0440 (0.0627) loss_objectness: 0.0518 (0.0602) loss_rpn_box_reg: 0.1402 (0.1474) time: 2.0247 data: 0.0059 max mem: 5232
Epoch: [9] [120/235] eta: 0:03:41 lr: 0.000005 loss: 0.3141 (0.3135) loss_classifier: 0.0323 (0.0443) loss_box_reg: 0.0406 (0.0635) loss_objectness: 0.0567 (0.0594) loss_rpn_box_reg: 0.1491 (0.1463) time: 2.0145 data: 0.0061 max mem: 5232
Epoch: [9] [130/235] eta: 0:03:23 lr: 0.000005 loss: 0.3133 (0.3150) loss_classifier: 0.0453 (0.0453) loss_box_reg: 0.0638 (0.0641) loss_objectness: 0.0474 (0.0592) loss_rpn_box_reg: 0.1273 (0.1464) time: 1.9637 data: 0.0063 max mem: 5348
Epoch: [9] [140/235] eta: 0:03:04 lr: 0.000005 loss: 0.3479 (0.3198) loss_classifier: 0.0465 (0.0454) loss_box_reg: 0.0664 (0.0646) loss_objectness: 0.0587 (0.0608) loss_rpn_box_reg: 0.1609 (0.1490) time: 2.0352 data: 0.0062 max mem: 5348
Epoch: [9] [150/235] eta: 0:02:45 lr: 0.000005 loss: 0.3425 (0.3164) loss_classifier: 0.0424 (0.0456) loss_box_reg: 0.0569 (0.0648) loss_objectness: 0.0558 (0.0599) loss_rpn_box_reg: 0.1333 (0.1461) time: 1.9942 data: 0.0061 max mem: 5348
Epoch: [9] [160/235] eta: 0:02:25 lr: 0.000005 loss: 0.2556 (0.3151) loss_classifier: 0.0282 (0.0448) loss_box_reg: 0.0399 (0.0641) loss_objectness: 0.0477 (0.0594) loss_rpn_box_reg: 0.1192 (0.1467) time: 1.9091 data: 0.0059 max mem: 5348
Epoch: [9] [170/235] eta: 0:02:06 lr: 0.000005 loss: 0.2629 (0.3154) loss_classifier: 0.0341 (0.0452) loss_box_reg: 0.0435 (0.0648) loss_objectness: 0.0500 (0.0598) loss_rpn_box_reg: 0.1239 (0.1456) time: 1.9118 data: 0.0059 max mem: 5348
Epoch: [9] [180/235] eta: 0:01:46 lr: 0.000005 loss: 0.3034 (0.3162) loss_classifier: 0.0383 (0.0453) loss_box_reg: 0.0655 (0.0652) loss_objectness: 0.0643 (0.0604) loss_rpn_box_reg: 0.1216 (0.1453) time: 1.8961 data: 0.0070 max mem: 5348
Epoch: [9] [190/235] eta: 0:01:27 lr: 0.000005 loss: 0.2764 (0.3141) loss_classifier: 0.0368 (0.0450) loss_box_reg: 0.0563 (0.0646) loss_objectness: 0.0486 (0.0600) loss_rpn_box_reg: 0.1173 (0.1445) time: 1.9192 data: 0.0070 max mem: 5348
Epoch: [9] [200/235] eta: 0:01:08 lr: 0.000005 loss: 0.2732 (0.3127) loss_classifier: 0.0433 (0.0455) loss_box_reg: 0.0530 (0.0651) loss_objectness: 0.0467 (0.0595) loss_rpn_box_reg: 0.1067 (0.1426) time: 2.0312 data: 0.0062 max mem: 5348
Epoch: [9] [210/235] eta: 0:00:48 lr: 0.000005 loss: 0.3082 (0.3152) loss_classifier: 0.0595 (0.0467) loss_box_reg: 0.0839 (0.0671) loss_objectness: 0.0504 (0.0598) loss_rpn_box_reg: 0.1057 (0.1417) time: 1.9666 data: 0.0063 max mem: 5348
Epoch: [9] [220/235] eta: 0:00:29 lr: 0.000005 loss: 0.3319 (0.3161) loss_classifier: 0.0562 (0.0471) loss_box_reg: 0.0831 (0.0675) loss_objectness: 0.0534 (0.0594) loss_rpn_box_reg: 0.1251 (0.1421) time: 1.8806 data: 0.0060 max mem: 5348
Epoch: [9] [230/235] eta: 0:00:09 lr: 0.000005 loss: 0.3331 (0.3162) loss_classifier: 0.0538 (0.0472) loss_box_reg: 0.0719 (0.0680) loss_objectness: 0.0555 (0.0593) loss_rpn_box_reg: 0.1251 (0.1417) time: 1.9043 data: 0.0059 max mem: 5348
Epoch: [9] [234/235] eta: 0:00:01 lr: 0.000005 loss: 0.3273 (0.3154) loss_classifier: 0.0504 (0.0470) loss_box_reg: 0.0719 (0.06

78) loss_objectness: 0.0551 (0.0590) loss_rpn_box_reg: 0.1251 (0.1416) time: 1.7987 data: 0.0058 max mem: 5348

Epoch: [9] Total time: 0:07:33 (1.9292 s / it)

creating index...

index created!

Test: [0/26] eta: 0:00:34 model_time: 1.0786 (1.0786) evaluator_time: 0.0031 (0.0031) time: 1.3344 data: 0.2501 max mem: 5348

Test: [25/26] eta: 0:00:00 model_time: 0.7559 (0.7745) evaluator_time: 0.0020 (0.0025) time: 0.7619 data: 0.0041 max mem: 5348

Test: Total time: 0:00:20 (0.7951 s / it)

Averaged stats: model_time: 0.7559 (0.7745) evaluator_time: 0.0020 (0.0025)

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.500

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.771

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.528

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.437

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.553

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.362

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.572

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.572

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.512

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.624

creating index...

index created!

Test: [0/235] eta: 0:04:06 model_time: 0.7800 (0.7800) evaluator_time: 0.0033 (0.0033) time: 1.0471 data: 0.2613 max mem: 5348

Test: [100/235] eta: 0:01:50 model_time: 0.8014 (0.8058) evaluator_time: 0.0026 (0.0033) time: 0.8293 data: 0.0058 max mem: 5348

Test: [200/235] eta: 0:00:29 model_time: 0.8050 (0.8221) evaluator_time: 0.0027 (0.0031) time: 0.8277 data: 0.0059 max mem: 5348

Test: [234/235] eta: 0:00:00 model_time: 0.8103 (0.8216) evaluator_time: 0.0026 (0.0031) time: 0.8265 data: 0.0057 max mem: 5348

Test: Total time: 0:03:15 (0.8334 s / it)

Averaged stats: model_time: 0.8103 (0.8216) evaluator_time: 0.0026 (0.0031)

Accumulating evaluation results...

DONE (t=0.08s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.289

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=1
00] = 0.540
Average Precision (AP) @[IoU=0.75 | area= all | maxDets=1
00] = 0.283
Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=1
00] = 0.000
Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=1
00] = 0.210
Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=1
00] = 0.315
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=
1] = 0.217
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=
10] = 0.432
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1
00] = 0.447
Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=1
00] = 0.000
Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=1
00] = 0.338
Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=1
00] = 0.480
Epoch: [10] [0/235] eta: 0:08:45 lr: 0.000005 loss: 0.2486
(0.2486) loss_classifier: 0.0515 (0.0515) loss_box_reg: 0.0453
(0.0453) loss_objectness: 0.0327 (0.0327) loss_rpn_box_reg: 0.11
92 (0.1192) time: 2.2341 data: 0.3407 max mem: 5348
Epoch: [10] [10/235] eta: 0:07:39 lr: 0.000005 loss: 0.3053
(0.2885) loss_classifier: 0.0462 (0.0459) loss_box_reg: 0.0587
(0.0569) loss_objectness: 0.0427 (0.0490) loss_rpn_box_reg: 0.13
24 (0.1367) time: 2.0427 data: 0.0349 max mem: 5348
Epoch: [10] [20/235] eta: 0:07:00 lr: 0.000005 loss: 0.3241
(0.3121) loss_classifier: 0.0446 (0.0471) loss_box_reg: 0.0521
(0.0578) loss_objectness: 0.0452 (0.0676) loss_rpn_box_reg: 0.13
98 (0.1396) time: 1.9437 data: 0.0038 max mem: 5348
Epoch: [10] [30/235] eta: 0:06:44 lr: 0.000005 loss: 0.3337
(0.3080) loss_classifier: 0.0407 (0.0441) loss_box_reg: 0.0483
(0.0573) loss_objectness: 0.0629 (0.0614) loss_rpn_box_reg: 0.13
98 (0.1451) time: 1.9384 data: 0.0049 max mem: 5348
Epoch: [10] [40/235] eta: 0:06:17 lr: 0.000005 loss: 0.2935
(0.3045) loss_classifier: 0.0336 (0.0428) loss_box_reg: 0.0483
(0.0548) loss_objectness: 0.0404 (0.0613) loss_rpn_box_reg: 0.14
07 (0.1456) time: 1.9125 data: 0.0065 max mem: 5348
Epoch: [10] [50/235] eta: 0:05:53 lr: 0.000005 loss: 0.2983
(0.3090) loss_classifier: 0.0399 (0.0445) loss_box_reg: 0.0450
(0.0570) loss_objectness: 0.0541 (0.0647) loss_rpn_box_reg: 0.13
11 (0.1428) time: 1.8150 data: 0.0063 max mem: 5348
Epoch: [10] [60/235] eta: 0:05:40 lr: 0.000005 loss: 0.3365
(0.3146) loss_classifier: 0.0366 (0.0445) loss_box_reg: 0.0401
(0.0584) loss_objectness: 0.0406 (0.0625) loss_rpn_box_reg: 0.14
42 (0.1492) time: 1.9718 data: 0.0060 max mem: 5348
Epoch: [10] [70/235] eta: 0:05:22 lr: 0.000005 loss: 0.3218
(0.3161) loss_classifier: 0.0473 (0.0463) loss_box_reg: 0.0670
(0.0623) loss_objectness: 0.0418 (0.0613) loss_rpn_box_reg: 0.14
85 (0.1463) time: 2.0559 data: 0.0060 max mem: 5348
Epoch: [10] [80/235] eta: 0:05:04 lr: 0.000005 loss: 0.3269
(0.3198) loss_classifier: 0.0487 (0.0462) loss_box_reg: 0.0739
(0.0635) loss_objectness: 0.0534 (0.0625) loss_rpn_box_reg: 0.13
73 (0.1476) time: 2.0220 data: 0.0060 max mem: 5348
Epoch: [10] [90/235] eta: 0:04:43 lr: 0.000005 loss: 0.3629
(0.3203) loss_classifier: 0.0459 (0.0460) loss_box_reg: 0.0676
(0.0639) loss_objectness: 0.0654 (0.0626) loss_rpn_box_reg: 0.14

39 (0.1479) time: 1.9476 data: 0.0062 max mem: 5348
Epoch: [10] [100/235] eta: 0:04:25 lr: 0.000005 loss: 0.3335
(0.3217) loss_classifier: 0.0470 (0.0469) loss_box_reg: 0.0612
(0.0639) loss_objectness: 0.0470 (0.0620) loss_rpn_box_reg: 0.14
39 (0.1490) time: 1.9523 data: 0.0062 max mem: 5348
Epoch: [10] [110/235] eta: 0:04:03 lr: 0.000005 loss: 0.3335
(0.3208) loss_classifier: 0.0429 (0.0466) loss_box_reg: 0.0582
(0.0635) loss_objectness: 0.0582 (0.0627) loss_rpn_box_reg: 0.13
56 (0.1480) time: 1.9376 data: 0.0060 max mem: 5348
Epoch: [10] [120/235] eta: 0:03:42 lr: 0.000005 loss: 0.3355
(0.3206) loss_classifier: 0.0436 (0.0477) loss_box_reg: 0.0594
(0.0647) loss_objectness: 0.0541 (0.0615) loss_rpn_box_reg: 0.12
84 (0.1466) time: 1.8170 data: 0.0060 max mem: 5348
Epoch: [10] [130/235] eta: 0:03:23 lr: 0.000005 loss: 0.3356
(0.3245) loss_classifier: 0.0539 (0.0479) loss_box_reg: 0.0798
(0.0659) loss_objectness: 0.0436 (0.0617) loss_rpn_box_reg: 0.13
48 (0.1489) time: 1.8536 data: 0.0061 max mem: 5348
Epoch: [10] [140/235] eta: 0:03:03 lr: 0.000005 loss: 0.2722
(0.3221) loss_classifier: 0.0417 (0.0474) loss_box_reg: 0.0729
(0.0658) loss_objectness: 0.0519 (0.0610) loss_rpn_box_reg: 0.13
79 (0.1479) time: 1.8845 data: 0.0061 max mem: 5348
Epoch: [10] [150/235] eta: 0:02:44 lr: 0.000005 loss: 0.2405
(0.3192) loss_classifier: 0.0395 (0.0471) loss_box_reg: 0.0529
(0.0646) loss_objectness: 0.0496 (0.0600) loss_rpn_box_reg: 0.10
97 (0.1475) time: 1.9764 data: 0.0061 max mem: 5348
Epoch: [10] [160/235] eta: 0:02:25 lr: 0.000005 loss: 0.2542
(0.3191) loss_classifier: 0.0383 (0.0475) loss_box_reg: 0.0372
(0.0657) loss_objectness: 0.0496 (0.0599) loss_rpn_box_reg: 0.11
01 (0.1460) time: 2.0373 data: 0.0061 max mem: 5348
Epoch: [10] [170/235] eta: 0:02:06 lr: 0.000005 loss: 0.2994
(0.3186) loss_classifier: 0.0467 (0.0474) loss_box_reg: 0.0624
(0.0666) loss_objectness: 0.0534 (0.0597) loss_rpn_box_reg: 0.12
32 (0.1449) time: 1.9622 data: 0.0059 max mem: 5348
Epoch: [10] [180/235] eta: 0:01:47 lr: 0.000005 loss: 0.2717
(0.3164) loss_classifier: 0.0389 (0.0474) loss_box_reg: 0.0593
(0.0665) loss_objectness: 0.0426 (0.0591) loss_rpn_box_reg: 0.10
86 (0.1434) time: 1.9935 data: 0.0059 max mem: 5348
Epoch: [10] [190/235] eta: 0:01:27 lr: 0.000005 loss: 0.2717
(0.3184) loss_classifier: 0.0471 (0.0480) loss_box_reg: 0.0656
(0.0680) loss_objectness: 0.0453 (0.0598) loss_rpn_box_reg: 0.11
32 (0.1427) time: 2.0377 data: 0.0062 max mem: 5348
Epoch: [10] [200/235] eta: 0:01:08 lr: 0.000005 loss: 0.2988
(0.3181) loss_classifier: 0.0479 (0.0480) loss_box_reg: 0.0677
(0.0681) loss_objectness: 0.0475 (0.0597) loss_rpn_box_reg: 0.11
74 (0.1423) time: 2.0083 data: 0.0069 max mem: 5348
Epoch: [10] [210/235] eta: 0:00:48 lr: 0.000005 loss: 0.2838
(0.3173) loss_classifier: 0.0411 (0.0479) loss_box_reg: 0.0593
(0.0678) loss_objectness: 0.0466 (0.0596) loss_rpn_box_reg: 0.13
06 (0.1420) time: 1.9293 data: 0.0069 max mem: 5348
Epoch: [10] [220/235] eta: 0:00:29 lr: 0.000005 loss: 0.2856
(0.3192) loss_classifier: 0.0411 (0.0478) loss_box_reg: 0.0602
(0.0678) loss_objectness: 0.0456 (0.0598) loss_rpn_box_reg: 0.14
47 (0.1437) time: 1.9484 data: 0.0070 max mem: 5348
Epoch: [10] [230/235] eta: 0:00:09 lr: 0.000005 loss: 0.2951
(0.3170) loss_classifier: 0.0413 (0.0474) loss_box_reg: 0.0602
(0.0673) loss_objectness: 0.0448 (0.0592) loss_rpn_box_reg: 0.14
96 (0.1430) time: 1.9308 data: 0.0068 max mem: 5348
Epoch: [10] [234/235] eta: 0:00:01 lr: 0.000005 loss: 0.3319
(0.3176) loss_classifier: 0.0418 (0.0474) loss_box_reg: 0.0637
(0.0674) loss_objectness: 0.0559 (0.0593) loss_rpn_box_reg: 0.15
26 (0.1435) time: 1.8579 data: 0.0065 max mem: 5348

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Epoch: [10] Total time: 0:07:37 (1.9465 s / it)
creating index...
index created!
Test: [ 0/26] eta: 0:00:34 model_time: 1.0696 (1.0696) evaluator_time: 0.0030 (0.0030) time: 1.3140 data: 0.2387 max mem: 5348
Test: [25/26] eta: 0:00:00 model_time: 0.7576 (0.7760) evaluator_time: 0.0023 (0.0026) time: 0.7635 data: 0.0035 max mem: 5348
Test: Total time: 0:00:20 (0.7970 s / it)
Averaged stats: model_time: 0.7576 (0.7760) evaluator_time: 0.0023 (0.0026)
Accumulating evaluation results...
DONE (t=0.02s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.497
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.767
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.524
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.437
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.550
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.359
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.565
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.565
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.512
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.615
creating index...
index created!
Test: [ 0/235] eta: 0:04:35 model_time: 0.8686 (0.8686) evaluator_time: 0.0054 (0.0054) time: 1.1722 data: 0.2958 max mem: 5348
Test: [100/235] eta: 0:01:51 model_time: 0.8094 (0.8100) evaluator_time: 0.0025 (0.0032) time: 0.8365 data: 0.0059 max mem: 5348
Test: [200/235] eta: 0:00:29 model_time: 0.8171 (0.8221) evaluator_time: 0.0023 (0.0031) time: 0.8691 data: 0.0059 max mem: 5348
Test: [234/235] eta: 0:00:00 model_time: 0.8022 (0.8184) evaluator_time: 0.0023 (0.0031) time: 0.7938 data: 0.0058 max mem: 5348
Test: Total time: 0:03:15 (0.8305 s / it)
Averaged stats: model_time: 0.8022 (0.8184) evaluator_time: 0.0023 (0.0031)
Accumulating evaluation results...
DONE (t=0.08s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.276
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.532

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Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.262
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.216
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.305
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.220
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.423
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.433
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.326
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.472
Epoch: [11] [ 0/235] eta: 0:08:36 lr: 0.000005 loss: 0.2685
(0.2685) loss_classifier: 0.0153 (0.0153) loss_box_reg: 0.0293
(0.0293) loss_objectness: 0.0801 (0.0801) loss_rpn_box_reg: 0.14
38 (0.1438) time: 2.1978 data: 0.2908 max mem: 5348
Epoch: [11] [ 10/235] eta: 0:07:14 lr: 0.000005 loss: 0.2685
(0.2870) loss_classifier: 0.0307 (0.0347) loss_box_reg: 0.0387
(0.0433) loss_objectness: 0.0533 (0.0551) loss_rpn_box_reg: 0.14
38 (0.1539) time: 1.9289 data: 0.0321 max mem: 5348
Epoch: [11] [ 20/235] eta: 0:07:04 lr: 0.000005 loss: 0.3017
(0.3126) loss_classifier: 0.0429 (0.0437) loss_box_reg: 0.0591
(0.0575) loss_objectness: 0.0506 (0.0598) loss_rpn_box_reg: 0.13
23 (0.1516) time: 1.9628 data: 0.0053 max mem: 5348
Epoch: [11] [ 30/235] eta: 0:06:46 lr: 0.000005 loss: 0.3017
(0.3242) loss_classifier: 0.0429 (0.0440) loss_box_reg: 0.0559
(0.0605) loss_objectness: 0.0601 (0.0656) loss_rpn_box_reg: 0.13
11 (0.1541) time: 2.0148 data: 0.0057 max mem: 5348
Epoch: [11] [ 40/235] eta: 0:06:22 lr: 0.000005 loss: 0.3559
(0.3378) loss_classifier: 0.0445 (0.0496) loss_box_reg: 0.0609
(0.0668) loss_objectness: 0.0684 (0.0684) loss_rpn_box_reg: 0.14
45 (0.1531) time: 1.9481 data: 0.0066 max mem: 5348
Epoch: [11] [ 50/235] eta: 0:06:02 lr: 0.000005 loss: 0.3217
(0.3321) loss_classifier: 0.0596 (0.0492) loss_box_reg: 0.0632
(0.0669) loss_objectness: 0.0489 (0.0642) loss_rpn_box_reg: 0.13
89 (0.1519) time: 1.9194 data: 0.0060 max mem: 5348
Epoch: [11] [ 60/235] eta: 0:05:42 lr: 0.000005 loss: 0.3049
(0.3301) loss_classifier: 0.0403 (0.0481) loss_box_reg: 0.0485
(0.0659) loss_objectness: 0.0422 (0.0636) loss_rpn_box_reg: 0.13
85 (0.1526) time: 1.9542 data: 0.0060 max mem: 5348
Epoch: [11] [ 70/235] eta: 0:05:24 lr: 0.000005 loss: 0.3085
(0.3301) loss_classifier: 0.0403 (0.0476) loss_box_reg: 0.0485
(0.0659) loss_objectness: 0.0423 (0.0620) loss_rpn_box_reg: 0.14
07 (0.1546) time: 1.9970 data: 0.0060 max mem: 5348
Epoch: [11] [ 80/235] eta: 0:05:03 lr: 0.000005 loss: 0.3062
(0.3286) loss_classifier: 0.0446 (0.0477) loss_box_reg: 0.0540
(0.0655) loss_objectness: 0.0423 (0.0606) loss_rpn_box_reg: 0.15
64 (0.1547) time: 1.9508 data: 0.0061 max mem: 5348
Epoch: [11] [ 90/235] eta: 0:04:42 lr: 0.000005 loss: 0.2617
(0.3229) loss_classifier: 0.0405 (0.0467) loss_box_reg: 0.0540
(0.0649) loss_objectness: 0.0452 (0.0595) loss_rpn_box_reg: 0.11
58 (0.1517) time: 1.8641 data: 0.0066 max mem: 5348
Epoch: [11] [100/235] eta: 0:04:22 lr: 0.000005 loss: 0.2726
```



```
(0.3229) loss_classifier: 0.0391 (0.0469) loss_box_reg: 0.0566
(0.0649) loss_objectness: 0.0497 (0.0598) loss_rpn_box_reg: 0.12
48 (0.1512) time: 1.8883 data: 0.0068 max mem: 5348
Epoch: [11] [110/235] eta: 0:04:01 lr: 0.000005 loss: 0.2726
(0.3202) loss_classifier: 0.0450 (0.0473) loss_box_reg: 0.0578
(0.0651) loss_objectness: 0.0497 (0.0604) loss_rpn_box_reg: 0.10
82 (0.1474) time: 1.8797 data: 0.0065 max mem: 5348
Epoch: [11] [120/235] eta: 0:03:43 lr: 0.000005 loss: 0.3004
(0.3241) loss_classifier: 0.0518 (0.0483) loss_box_reg: 0.0649
(0.0668) loss_objectness: 0.0500 (0.0614) loss_rpn_box_reg: 0.12
18 (0.1476) time: 1.9537 data: 0.0062 max mem: 5348
Epoch: [11] [130/235] eta: 0:03:25 lr: 0.000005 loss: 0.3024
(0.3189) loss_classifier: 0.0408 (0.0471) loss_box_reg: 0.0643
(0.0654) loss_objectness: 0.0460 (0.0601) loss_rpn_box_reg: 0.13
24 (0.1463) time: 2.0773 data: 0.0061 max mem: 5348
Epoch: [11] [140/235] eta: 0:03:05 lr: 0.000005 loss: 0.2737
(0.3179) loss_classifier: 0.0408 (0.0472) loss_box_reg: 0.0385
(0.0656) loss_objectness: 0.0406 (0.0599) loss_rpn_box_reg: 0.10
68 (0.1453) time: 2.0264 data: 0.0064 max mem: 5348
Epoch: [11] [150/235] eta: 0:02:45 lr: 0.000005 loss: 0.2849
(0.3163) loss_classifier: 0.0463 (0.0468) loss_box_reg: 0.0666
(0.0657) loss_objectness: 0.0406 (0.0594) loss_rpn_box_reg: 0.11
04 (0.1445) time: 1.8705 data: 0.0063 max mem: 5348
Epoch: [11] [160/235] eta: 0:02:25 lr: 0.000005 loss: 0.2866
(0.3198) loss_classifier: 0.0444 (0.0484) loss_box_reg: 0.0678
(0.0685) loss_objectness: 0.0502 (0.0603) loss_rpn_box_reg: 0.10
79 (0.1426) time: 1.8198 data: 0.0060 max mem: 5348
Epoch: [11] [170/235] eta: 0:02:06 lr: 0.000005 loss: 0.3032
(0.3203) loss_classifier: 0.0462 (0.0481) loss_box_reg: 0.0559
(0.0682) loss_objectness: 0.0505 (0.0600) loss_rpn_box_reg: 0.12
93 (0.1439) time: 1.9329 data: 0.0060 max mem: 5348
Epoch: [11] [180/235] eta: 0:01:46 lr: 0.000005 loss: 0.3058
(0.3208) loss_classifier: 0.0423 (0.0488) loss_box_reg: 0.0559
(0.0691) loss_objectness: 0.0554 (0.0606) loss_rpn_box_reg: 0.13
36 (0.1422) time: 1.9550 data: 0.0059 max mem: 5348
Epoch: [11] [190/235] eta: 0:01:27 lr: 0.000005 loss: 0.2832
(0.3195) loss_classifier: 0.0400 (0.0483) loss_box_reg: 0.0600
(0.0685) loss_objectness: 0.0548 (0.0602) loss_rpn_box_reg: 0.12
05 (0.1424) time: 1.9541 data: 0.0060 max mem: 5348
Epoch: [11] [200/235] eta: 0:01:08 lr: 0.000005 loss: 0.2845
(0.3195) loss_classifier: 0.0294 (0.0477) loss_box_reg: 0.0401
(0.0682) loss_objectness: 0.0449 (0.0608) loss_rpn_box_reg: 0.15
07 (0.1428) time: 1.9889 data: 0.0062 max mem: 5348
Epoch: [11] [210/235] eta: 0:00:48 lr: 0.000005 loss: 0.3433
(0.3201) loss_classifier: 0.0352 (0.0480) loss_box_reg: 0.0538
(0.0686) loss_objectness: 0.0481 (0.0606) loss_rpn_box_reg: 0.13
57 (0.1429) time: 1.9709 data: 0.0064 max mem: 5348
Epoch: [11] [220/235] eta: 0:00:29 lr: 0.000005 loss: 0.2820
(0.3179) loss_classifier: 0.0415 (0.0475) loss_box_reg: 0.0559
(0.0677) loss_objectness: 0.0481 (0.0606) loss_rpn_box_reg: 0.10
60 (0.1421) time: 1.9272 data: 0.0065 max mem: 5348
Epoch: [11] [230/235] eta: 0:00:09 lr: 0.000005 loss: 0.2835
(0.3183) loss_classifier: 0.0424 (0.0474) loss_box_reg: 0.0489
(0.0675) loss_objectness: 0.0456 (0.0604) loss_rpn_box_reg: 0.13
29 (0.1429) time: 2.0702 data: 0.0063 max mem: 5348
Epoch: [11] [234/235] eta: 0:00:01 lr: 0.000005 loss: 0.2835
(0.3184) loss_classifier: 0.0424 (0.0477) loss_box_reg: 0.0479
(0.0675) loss_objectness: 0.0426 (0.0603) loss_rpn_box_reg: 0.13
29 (0.1429) time: 2.0326 data: 0.0061 max mem: 5348
Epoch: [11] Total time: 0:07:38 (1.9513 s / it)
creating index...
```

index created!

Test: [0/26] eta: 0:00:34 model_time: 1.0741 (1.0741) evaluator_time: 0.0044 (0.0044) time: 1.3097 data: 0.2279 max mem: 5348
Test: [25/26] eta: 0:00:00 model_time: 0.7624 (0.7773) evaluator_time: 0.0019 (0.0025) time: 0.7663 data: 0.0051 max mem: 5348
Test: Total time: 0:00:20 (0.7975 s / it)
Averaged stats: model_time: 0.7624 (0.7773) evaluator_time: 0.0019 (0.0025)

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.497

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.762

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.523

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.437

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.550

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.361

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.569

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.569

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.512

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.620

creating index...

index created!

Test: [0/235] eta: 0:04:20 model_time: 0.8913 (0.8913) evaluator_time: 0.0149 (0.0149) time: 1.1094 data: 0.2003 max mem: 5348

Test: [100/235] eta: 0:01:54 model_time: 0.8152 (0.8362) evaluator_time: 0.0026 (0.0033) time: 0.8780 data: 0.0058 max mem: 5348

Test: [200/235] eta: 0:00:29 model_time: 0.8070 (0.8398) evaluator_time: 0.0025 (0.0032) time: 0.8417 data: 0.0059 max mem: 5348

Test: [234/235] eta: 0:00:00 model_time: 0.7995 (0.8333) evaluator_time: 0.0022 (0.0031) time: 0.7940 data: 0.0055 max mem: 5348

Test: Total time: 0:03:18 (0.8457 s / it)

Averaged stats: model_time: 0.7995 (0.8333) evaluator_time: 0.0022 (0.0031)

Accumulating evaluation results...

DONE (t=0.08s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.284

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.529

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.280

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.062
Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.232
Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.308
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.213
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.423
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.438
Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.060
Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.330
Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.475
Epoch: [12] [0/235] eta: 0:08:26 lr: 0.000001 loss: 0.3090
(0.3090) loss_classifier: 0.0318 (0.0318) loss_box_reg: 0.0690
(0.0690) loss_objectness: 0.0391 (0.0391) loss_rpn_box_reg: 0.1692 (0.1692) time: 2.1545 data: 0.2529 max mem: 5348
Epoch: [12] [10/235] eta: 0:07:31 lr: 0.000001 loss: 0.3090
(0.3072) loss_classifier: 0.0466 (0.0476) loss_box_reg: 0.0588
(0.0695) loss_objectness: 0.0391 (0.0494) loss_rpn_box_reg: 0.1413 (0.1407) time: 2.0048 data: 0.0299 max mem: 5348
Epoch: [12] [20/235] eta: 0:07:26 lr: 0.000001 loss: 0.3156
(0.3155) loss_classifier: 0.0466 (0.0473) loss_box_reg: 0.0536
(0.0675) loss_objectness: 0.0461 (0.0533) loss_rpn_box_reg: 0.1303 (0.1473) time: 2.0708 data: 0.0055 max mem: 5348
Epoch: [12] [30/235] eta: 0:06:51 lr: 0.000001 loss: 0.3194
(0.3169) loss_classifier: 0.0378 (0.0449) loss_box_reg: 0.0489
(0.0660) loss_objectness: 0.0510 (0.0616) loss_rpn_box_reg: 0.1303 (0.1444) time: 2.0114 data: 0.0047 max mem: 5348
Epoch: [12] [40/235] eta: 0:06:28 lr: 0.000001 loss: 0.2766
(0.3096) loss_classifier: 0.0374 (0.0432) loss_box_reg: 0.0489
(0.0632) loss_objectness: 0.0506 (0.0607) loss_rpn_box_reg: 0.1144 (0.1425) time: 1.9024 data: 0.0060 max mem: 5348
Epoch: [12] [50/235] eta: 0:06:07 lr: 0.000001 loss: 0.2903
(0.3116) loss_classifier: 0.0342 (0.0429) loss_box_reg: 0.0468
(0.0623) loss_objectness: 0.0499 (0.0616) loss_rpn_box_reg: 0.1179 (0.1448) time: 1.9563 data: 0.0060 max mem: 5348
Epoch: [12] [60/235] eta: 0:05:45 lr: 0.000001 loss: 0.3019
(0.3168) loss_classifier: 0.0446 (0.0453) loss_box_reg: 0.0584
(0.0650) loss_objectness: 0.0565 (0.0628) loss_rpn_box_reg: 0.1491 (0.1437) time: 1.9372 data: 0.0060 max mem: 5348
Epoch: [12] [70/235] eta: 0:05:25 lr: 0.000001 loss: 0.3019
(0.3141) loss_classifier: 0.0446 (0.0448) loss_box_reg: 0.0584
(0.0624) loss_objectness: 0.0565 (0.0613) loss_rpn_box_reg: 0.1457 (0.1457) time: 1.9330 data: 0.0061 max mem: 5348
Epoch: [12] [80/235] eta: 0:05:05 lr: 0.000001 loss: 0.2909
(0.3107) loss_classifier: 0.0353 (0.0442) loss_box_reg: 0.0565
(0.0627) loss_objectness: 0.0461 (0.0597) loss_rpn_box_reg: 0.1436 (0.1442) time: 1.9628 data: 0.0061 max mem: 5348
Epoch: [12] [90/235] eta: 0:04:43 lr: 0.000001 loss: 0.3150
(0.3142) loss_classifier: 0.0510 (0.0463) loss_box_reg: 0.0633
(0.0662) loss_objectness: 0.0606 (0.0606) loss_rpn_box_reg: 0.1213 (0.1412) time: 1.8922 data: 0.0061 max mem: 5348
Epoch: [12] [100/235] eta: 0:04:22 lr: 0.000001 loss: 0.3364
(0.3166) loss_classifier: 0.0521 (0.0458) loss_box_reg: 0.0644
(0.0657) loss_objectness: 0.0660 (0.0616) loss_rpn_box_reg: 0.12

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36 (0.1434) time: 1.8510 data: 0.0060 max mem: 5348
Epoch: [12] [110/235] eta: 0:04:05 lr: 0.000001 loss: 0.3515
(0.3232) loss_classifier: 0.0502 (0.0472) loss_box_reg: 0.0611
(0.0679) loss_objectness: 0.0635 (0.0623) loss_rpn_box_reg: 0.15
94 (0.1457) time: 1.9964 data: 0.0070 max mem: 5348
Epoch: [12] [120/235] eta: 0:03:45 lr: 0.000001 loss: 0.3336
(0.3222) loss_classifier: 0.0511 (0.0478) loss_box_reg: 0.0694
(0.0685) loss_objectness: 0.0520 (0.0616) loss_rpn_box_reg: 0.14
50 (0.1443) time: 2.0509 data: 0.0070 max mem: 5348
Epoch: [12] [130/235] eta: 0:03:25 lr: 0.000001 loss: 0.3152
(0.3201) loss_classifier: 0.0500 (0.0475) loss_box_reg: 0.0619
(0.0674) loss_objectness: 0.0446 (0.0615) loss_rpn_box_reg: 0.13
66 (0.1437) time: 1.9119 data: 0.0059 max mem: 5348
Epoch: [12] [140/235] eta: 0:03:05 lr: 0.000001 loss: 0.3152
(0.3200) loss_classifier: 0.0425 (0.0479) loss_box_reg: 0.0543
(0.0682) loss_objectness: 0.0485 (0.0611) loss_rpn_box_reg: 0.13
66 (0.1429) time: 1.8998 data: 0.0060 max mem: 5348
Epoch: [12] [150/235] eta: 0:02:46 lr: 0.000001 loss: 0.3067
(0.3191) loss_classifier: 0.0405 (0.0473) loss_box_reg: 0.0577
(0.0683) loss_objectness: 0.0441 (0.0601) loss_rpn_box_reg: 0.14
26 (0.1435) time: 1.9694 data: 0.0060 max mem: 5348
Epoch: [12] [160/235] eta: 0:02:26 lr: 0.000001 loss: 0.2897
(0.3186) loss_classifier: 0.0382 (0.0466) loss_box_reg: 0.0646
(0.0674) loss_objectness: 0.0441 (0.0600) loss_rpn_box_reg: 0.14
51 (0.1447) time: 1.9807 data: 0.0060 max mem: 5348
Epoch: [12] [170/235] eta: 0:02:07 lr: 0.000001 loss: 0.2770
(0.3194) loss_classifier: 0.0404 (0.0468) loss_box_reg: 0.0534
(0.0678) loss_objectness: 0.0447 (0.0599) loss_rpn_box_reg: 0.12
66 (0.1449) time: 1.9387 data: 0.0061 max mem: 5348
Epoch: [12] [180/235] eta: 0:01:47 lr: 0.000001 loss: 0.3213
(0.3212) loss_classifier: 0.0415 (0.0472) loss_box_reg: 0.0534
(0.0687) loss_objectness: 0.0580 (0.0609) loss_rpn_box_reg: 0.11
22 (0.1445) time: 1.8761 data: 0.0062 max mem: 5348
Epoch: [12] [190/235] eta: 0:01:27 lr: 0.000001 loss: 0.2928
(0.3194) loss_classifier: 0.0416 (0.0469) loss_box_reg: 0.0518
(0.0679) loss_objectness: 0.0565 (0.0607) loss_rpn_box_reg: 0.10
59 (0.1439) time: 1.8152 data: 0.0061 max mem: 5348
Epoch: [12] [200/235] eta: 0:01:08 lr: 0.000001 loss: 0.2928
(0.3208) loss_classifier: 0.0434 (0.0476) loss_box_reg: 0.0528
(0.0686) loss_objectness: 0.0555 (0.0607) loss_rpn_box_reg: 0.11
24 (0.1439) time: 1.9981 data: 0.0060 max mem: 5348
Epoch: [12] [210/235] eta: 0:00:48 lr: 0.000001 loss: 0.2973
(0.3185) loss_classifier: 0.0434 (0.0469) loss_box_reg: 0.0528
(0.0676) loss_objectness: 0.0488 (0.0600) loss_rpn_box_reg: 0.11
79 (0.1440) time: 2.0527 data: 0.0060 max mem: 5348
Epoch: [12] [220/235] eta: 0:00:29 lr: 0.000001 loss: 0.2623
(0.3173) loss_classifier: 0.0392 (0.0468) loss_box_reg: 0.0569
(0.0680) loss_objectness: 0.0401 (0.0600) loss_rpn_box_reg: 0.12
07 (0.1425) time: 1.9168 data: 0.0061 max mem: 5348
Epoch: [12] [230/235] eta: 0:00:09 lr: 0.000001 loss: 0.2825
(0.3178) loss_classifier: 0.0461 (0.0474) loss_box_reg: 0.0790
(0.0690) loss_objectness: 0.0505 (0.0598) loss_rpn_box_reg: 0.10
61 (0.1416) time: 1.9176 data: 0.0060 max mem: 5348
Epoch: [12] [234/235] eta: 0:00:01 lr: 0.000001 loss: 0.2825
(0.3188) loss_classifier: 0.0398 (0.0472) loss_box_reg: 0.0710
(0.0686) loss_objectness: 0.0505 (0.0604) loss_rpn_box_reg: 0.11
72 (0.1426) time: 1.8870 data: 0.0059 max mem: 5348
Epoch: [12] Total time: 0:07:36 (1.9424 s / it)
creating index...
index created!
Test: [ 0/26] eta: 0:00:34 model_time: 1.0727 (1.0727) evaluato
```

```
r_time: 0.0028 (0.0028) time: 1.3193 data: 0.2408 max mem: 5348
Test: [25/26] eta: 0:00:00 model_time: 0.7631 (0.7749) evaluator_time: 0.0022 (0.0026)
Test: Total time: 0:00:20 (0.7950 s / it)
Averaged stats: model_time: 0.7631 (0.7749) evaluator_time: 0.0022 (0.0026)
Accumulating evaluation results...
DONE (t=0.02s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.497
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.762
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.523
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.437
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.550
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.361
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.569
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.569
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.512
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.620
creating index...
index created!
Test: [ 0/235] eta: 0:04:28 model_time: 0.8911 (0.8911) evaluator_time: 0.0034 (0.0034) time: 1.1443 data: 0.2439 max mem: 5348
Test: [100/235] eta: 0:01:51 model_time: 0.7871 (0.8157) evaluator_time: 0.0025 (0.0032) time: 0.8027 data: 0.0057 max mem: 5348
Test: [200/235] eta: 0:00:29 model_time: 0.8083 (0.8243) evaluator_time: 0.0023 (0.0031) time: 0.8598 data: 0.0060 max mem: 5348
Test: [234/235] eta: 0:00:00 model_time: 0.7619 (0.8236) evaluator_time: 0.0024 (0.0031) time: 0.8079 data: 0.0056 max mem: 5348
Test: Total time: 0:03:16 (0.8353 s / it)
Averaged stats: model_time: 0.7619 (0.8236) evaluator_time: 0.0024 (0.0031)
Accumulating evaluation results...
DONE (t=0.08s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.271
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.511
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.271
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = 0.000
```

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.213
Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.300
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.226
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.416
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.433
Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000
Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.322
Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.473
Epoch: [13] [0/235] eta: 0:07:49 lr: 0.000001 loss: 0.3061
(0.3061) loss_classifier: 0.0185 (0.0185) loss_box_reg: 0.0247
(0.0247) loss_objectness: 0.0617 (0.0617) loss_rpn_box_reg: 0.2011 (0.2011) time: 1.9986 data: 0.2174 max mem: 5348
Epoch: [13] [10/235] eta: 0:07:00 lr: 0.000001 loss: 0.3061
(0.2983) loss_classifier: 0.0345 (0.0424) loss_box_reg: 0.0380
(0.0638) loss_objectness: 0.0617 (0.0611) loss_rpn_box_reg: 0.1130 (0.1310) time: 1.8678 data: 0.0270 max mem: 5348
Epoch: [13] [20/235] eta: 0:07:09 lr: 0.000001 loss: 0.2930
(0.2951) loss_classifier: 0.0427 (0.0459) loss_box_reg: 0.0409
(0.0641) loss_objectness: 0.0458 (0.0517) loss_rpn_box_reg: 0.1107 (0.1334) time: 1.9973 data: 0.0057 max mem: 5348
Epoch: [13] [30/235] eta: 0:06:47 lr: 0.000001 loss: 0.2930
(0.3069) loss_classifier: 0.0383 (0.0447) loss_box_reg: 0.0524
(0.0644) loss_objectness: 0.0458 (0.0559) loss_rpn_box_reg: 0.1245 (0.1420) time: 2.0562 data: 0.0048 max mem: 5348
Epoch: [13] [40/235] eta: 0:06:22 lr: 0.000001 loss: 0.2871
(0.3074) loss_classifier: 0.0383 (0.0459) loss_box_reg: 0.0530
(0.0671) loss_objectness: 0.0415 (0.0541) loss_rpn_box_reg: 0.1245 (0.1403) time: 1.9189 data: 0.0064 max mem: 5348
Epoch: [13] [50/235] eta: 0:05:57 lr: 0.000001 loss: 0.2690
(0.3002) loss_classifier: 0.0490 (0.0444) loss_box_reg: 0.0620
(0.0644) loss_objectness: 0.0400 (0.0523) loss_rpn_box_reg: 0.1215 (0.1391) time: 1.8407 data: 0.0064 max mem: 5348
Epoch: [13] [60/235] eta: 0:05:39 lr: 0.000001 loss: 0.2553
(0.2985) loss_classifier: 0.0468 (0.0440) loss_box_reg: 0.0553
(0.0633) loss_objectness: 0.0438 (0.0540) loss_rpn_box_reg: 0.1204 (0.1373) time: 1.8996 data: 0.0061 max mem: 5348
Epoch: [13] [70/235] eta: 0:05:22 lr: 0.000001 loss: 0.2982
(0.3004) loss_classifier: 0.0468 (0.0433) loss_box_reg: 0.0553
(0.0620) loss_objectness: 0.0453 (0.0541) loss_rpn_box_reg: 0.1294 (0.1409) time: 2.0204 data: 0.0064 max mem: 5348
Epoch: [13] [80/235] eta: 0:05:04 lr: 0.000001 loss: 0.3094
(0.3049) loss_classifier: 0.0457 (0.0445) loss_box_reg: 0.0670
(0.0649) loss_objectness: 0.0465 (0.0541) loss_rpn_box_reg: 0.1392 (0.1414) time: 2.0412 data: 0.0068 max mem: 5348
Epoch: [13] [90/235] eta: 0:04:43 lr: 0.000001 loss: 0.3094
(0.3021) loss_classifier: 0.0425 (0.0439) loss_box_reg: 0.0544
(0.0628) loss_objectness: 0.0474 (0.0534) loss_rpn_box_reg: 0.1392 (0.1420) time: 1.9441 data: 0.0064 max mem: 5348
Epoch: [13] [100/235] eta: 0:04:23 lr: 0.000001 loss: 0.3137
(0.3084) loss_classifier: 0.0431 (0.0449) loss_box_reg: 0.0544
(0.0652) loss_objectness: 0.0555 (0.0565) loss_rpn_box_reg: 0.1428 (0.1419) time: 1.8945 data: 0.0062 max mem: 5348
Epoch: [13] [110/235] eta: 0:04:01 lr: 0.000001 loss: 0.3353

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(0.3125) loss_classifier: 0.0517 (0.0459) loss_box_reg: 0.0721
(0.0659) loss_objectness: 0.0751 (0.0600) loss_rpn_box_reg: 0.11
77 (0.1407) time: 1.8541 data: 0.0062 max mem: 5348
Epoch: [13] [120/235] eta: 0:03:42 lr: 0.000001 loss: 0.3339
(0.3161) loss_classifier: 0.0429 (0.0461) loss_box_reg: 0.0721
(0.0672) loss_objectness: 0.0642 (0.0614) loss_rpn_box_reg: 0.12
57 (0.1415) time: 1.8321 data: 0.0061 max mem: 5348
Epoch: [13] [130/235] eta: 0:03:22 lr: 0.000001 loss: 0.2834
(0.3142) loss_classifier: 0.0336 (0.0452) loss_box_reg: 0.0570
(0.0661) loss_objectness: 0.0607 (0.0611) loss_rpn_box_reg: 0.13
80 (0.1417) time: 1.9189 data: 0.0060 max mem: 5348
Epoch: [13] [140/235] eta: 0:03:03 lr: 0.000001 loss: 0.2683
(0.3114) loss_classifier: 0.0336 (0.0452) loss_box_reg: 0.0433
(0.0659) loss_objectness: 0.0489 (0.0602) loss_rpn_box_reg: 0.13
12 (0.1401) time: 1.9246 data: 0.0061 max mem: 5348
Epoch: [13] [150/235] eta: 0:02:44 lr: 0.000001 loss: 0.2707
(0.3094) loss_classifier: 0.0376 (0.0449) loss_box_reg: 0.0483
(0.0647) loss_objectness: 0.0461 (0.0592) loss_rpn_box_reg: 0.13
86 (0.1405) time: 1.9556 data: 0.0064 max mem: 5348
Epoch: [13] [160/235] eta: 0:02:25 lr: 0.000001 loss: 0.2972
(0.3114) loss_classifier: 0.0376 (0.0452) loss_box_reg: 0.0541
(0.0654) loss_objectness: 0.0536 (0.0607) loss_rpn_box_reg: 0.13
86 (0.1401) time: 1.9992 data: 0.0062 max mem: 5348
Epoch: [13] [170/235] eta: 0:02:06 lr: 0.000001 loss: 0.3185
(0.3136) loss_classifier: 0.0426 (0.0454) loss_box_reg: 0.0660
(0.0663) loss_objectness: 0.0544 (0.0607) loss_rpn_box_reg: 0.14
66 (0.1413) time: 2.0010 data: 0.0060 max mem: 5348
Epoch: [13] [180/235] eta: 0:01:47 lr: 0.000001 loss: 0.3085
(0.3145) loss_classifier: 0.0486 (0.0460) loss_box_reg: 0.0731
(0.0669) loss_objectness: 0.0460 (0.0606) loss_rpn_box_reg: 0.14
66 (0.1410) time: 2.0379 data: 0.0061 max mem: 5348
Epoch: [13] [190/235] eta: 0:01:27 lr: 0.000001 loss: 0.3226
(0.3147) loss_classifier: 0.0449 (0.0455) loss_box_reg: 0.0542
(0.0659) loss_objectness: 0.0410 (0.0600) loss_rpn_box_reg: 0.14
76 (0.1433) time: 2.0357 data: 0.0061 max mem: 5348
Epoch: [13] [200/235] eta: 0:01:08 lr: 0.000001 loss: 0.3226
(0.3137) loss_classifier: 0.0404 (0.0460) loss_box_reg: 0.0448
(0.0656) loss_objectness: 0.0410 (0.0591) loss_rpn_box_reg: 0.14
54 (0.1430) time: 1.9689 data: 0.0063 max mem: 5348
Epoch: [13] [210/235] eta: 0:00:48 lr: 0.000001 loss: 0.3350
(0.3159) loss_classifier: 0.0496 (0.0467) loss_box_reg: 0.0672
(0.0671) loss_objectness: 0.0477 (0.0597) loss_rpn_box_reg: 0.13
32 (0.1424) time: 2.0024 data: 0.0072 max mem: 5348
Epoch: [13] [220/235] eta: 0:00:29 lr: 0.000001 loss: 0.3647
(0.3157) loss_classifier: 0.0503 (0.0466) loss_box_reg: 0.0655
(0.0672) loss_objectness: 0.0609 (0.0595) loss_rpn_box_reg: 0.13
32 (0.1424) time: 1.9737 data: 0.0068 max mem: 5348
Epoch: [13] [230/235] eta: 0:00:09 lr: 0.000001 loss: 0.3009
(0.3157) loss_classifier: 0.0479 (0.0469) loss_box_reg: 0.0634
(0.0673) loss_objectness: 0.0427 (0.0594) loss_rpn_box_reg: 0.13
24 (0.1422) time: 1.8760 data: 0.0063 max mem: 5348
Epoch: [13] [234/235] eta: 0:00:01 lr: 0.000001 loss: 0.3470
(0.3166) loss_classifier: 0.0496 (0.0474) loss_box_reg: 0.0635
(0.0678) loss_objectness: 0.0609 (0.0597) loss_rpn_box_reg: 0.12
54 (0.1417) time: 1.8374 data: 0.0062 max mem: 5348
Epoch: [13] Total time: 0:07:37 (1.9454 s / it)
creating index...
index created!
Test: [ 0/26] eta: 0:00:34 model_time: 1.0743 (1.0743) evaluator_time: 0.0033 (0.0033) time: 1.3248 data: 0.2435 max mem: 5348
Test: [25/26] eta: 0:00:00 model_time: 0.7568 (0.7749) evaluator_time: 0.0033 (0.0033) time: 1.3248 data: 0.2435 max mem: 5348
```

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r_time: 0.0022 (0.0026)  time: 0.7630  data: 0.0044  max mem: 5348
Test: Total time: 0:00:20 (0.7955 s / it)
Averaged stats: model_time: 0.7568 (0.7749)  evaluator_time: 0.0022
(0.0026)
Accumulating evaluation results...
DONE (t=0.02s).
IoU metric: bbox
Average Precision  (AP) @[ IoU=0.50:0.95 | area=  all | maxDets=1
00 ] = 0.496
Average Precision  (AP) @[ IoU=0.50      | area=  all | maxDets=1
00 ] = 0.762
Average Precision  (AP) @[ IoU=0.75      | area=  all | maxDets=1
00 ] = 0.523
Average Precision  (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Precision  (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.437
Average Precision  (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.549
Average Recall     (AR) @[ IoU=0.50:0.95 | area=  all | maxDets=
1 ] = 0.361
Average Recall     (AR) @[ IoU=0.50:0.95 | area=  all | maxDets=
10 ] = 0.569
Average Recall     (AR) @[ IoU=0.50:0.95 | area=  all | maxDets=1
00 ] = 0.569
Average Recall     (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Recall     (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.512
Average Recall     (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.620
creating index...
index created!
Test: [ 0/235]  eta: 0:04:28  model_time: 0.8856 (0.8856)  evalua
tor_time: 0.0053 (0.0053)  time: 1.1424  data: 0.2494  max mem: 534
8
Test: [100/235] eta: 0:01:52  model_time: 0.8099 (0.8201)  evalua
tor_time: 0.0025 (0.0032)  time: 0.8112  data: 0.0058  max mem: 534
8
Test: [200/235] eta: 0:00:29  model_time: 0.8025 (0.8252)  evalua
tor_time: 0.0024 (0.0031)  time: 0.8231  data: 0.0057  max mem: 534
8
Test: [234/235] eta: 0:00:00  model_time: 0.8189 (0.8254)  evalua
tor_time: 0.0026 (0.0031)  time: 0.8427  data: 0.0056  max mem: 534
8
Test: Total time: 0:03:16 (0.8371 s / it)
Averaged stats: model_time: 0.8189 (0.8254)  evaluator_time: 0.0026
(0.0031)
Accumulating evaluation results...
DONE (t=0.08s).
IoU metric: bbox
Average Precision  (AP) @[ IoU=0.50:0.95 | area=  all | maxDets=1
00 ] = 0.285
Average Precision  (AP) @[ IoU=0.50      | area=  all | maxDets=1
00 ] = 0.523
Average Precision  (AP) @[ IoU=0.75      | area=  all | maxDets=1
00 ] = 0.285
Average Precision  (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.052
Average Precision  (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.172

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Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.322
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.226
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.427
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.442
Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.050
Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.285
Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.486
Epoch: [14] [0/235] eta: 0:07:55 lr: 0.000001 loss: 0.3331
(0.3331) loss_classifier: 0.0318 (0.0318) loss_box_reg: 0.0508
(0.0508) loss_objectness: 0.1378 (0.1378) loss_rpn_box_reg: 0.1126 (0.1126) time: 2.0235 data: 0.2417 max mem: 5348
Epoch: [14] [10/235] eta: 0:07:13 lr: 0.000001 loss: 0.3331
(0.3458) loss_classifier: 0.0548 (0.0512) loss_box_reg: 0.0540
(0.0719) loss_objectness: 0.0480 (0.0715) loss_rpn_box_reg: 0.1469 (0.1511) time: 1.9266 data: 0.0284 max mem: 5348
Epoch: [14] [20/235] eta: 0:06:57 lr: 0.000001 loss: 0.2788
(0.3017) loss_classifier: 0.0429 (0.0457) loss_box_reg: 0.0468
(0.0605) loss_objectness: 0.0349 (0.0546) loss_rpn_box_reg: 0.1360 (0.1409) time: 1.9393 data: 0.0055 max mem: 5348
Epoch: [14] [30/235] eta: 0:06:43 lr: 0.000001 loss: 0.2773
(0.3093) loss_classifier: 0.0429 (0.0475) loss_box_reg: 0.0495
(0.0632) loss_objectness: 0.0456 (0.0591) loss_rpn_box_reg: 0.1287 (0.1395) time: 1.9896 data: 0.0049 max mem: 5348
Epoch: [14] [40/235] eta: 0:06:21 lr: 0.000001 loss: 0.3015
(0.3144) loss_classifier: 0.0432 (0.0476) loss_box_reg: 0.0611
(0.0636) loss_objectness: 0.0637 (0.0594) loss_rpn_box_reg: 0.1154 (0.1438) time: 1.9743 data: 0.0060 max mem: 5348
Epoch: [14] [50/235] eta: 0:05:59 lr: 0.000001 loss: 0.3164
(0.3199) loss_classifier: 0.0382 (0.0470) loss_box_reg: 0.0508
(0.0660) loss_objectness: 0.0525 (0.0589) loss_rpn_box_reg: 0.1456 (0.1481) time: 1.9084 data: 0.0060 max mem: 5348
Epoch: [14] [60/235] eta: 0:05:39 lr: 0.000001 loss: 0.2892
(0.3136) loss_classifier: 0.0271 (0.0449) loss_box_reg: 0.0426
(0.0634) loss_objectness: 0.0484 (0.0591) loss_rpn_box_reg: 0.1456 (0.1462) time: 1.8999 data: 0.0060 max mem: 5348
Epoch: [14] [70/235] eta: 0:05:21 lr: 0.000001 loss: 0.2720
(0.3109) loss_classifier: 0.0271 (0.0453) loss_box_reg: 0.0426
(0.0631) loss_objectness: 0.0509 (0.0599) loss_rpn_box_reg: 0.1148 (0.1426) time: 1.9580 data: 0.0061 max mem: 5348
Epoch: [14] [80/235] eta: 0:05:02 lr: 0.000001 loss: 0.3189
(0.3142) loss_classifier: 0.0332 (0.0448) loss_box_reg: 0.0513
(0.0629) loss_objectness: 0.0520 (0.0609) loss_rpn_box_reg: 0.1402 (0.1456) time: 1.9913 data: 0.0061 max mem: 5348
Epoch: [14] [90/235] eta: 0:04:41 lr: 0.000001 loss: 0.3091
(0.3134) loss_classifier: 0.0420 (0.0452) loss_box_reg: 0.0638
(0.0633) loss_objectness: 0.0586 (0.0607) loss_rpn_box_reg: 0.1402 (0.1441) time: 1.9323 data: 0.0060 max mem: 5348
Epoch: [14] [100/235] eta: 0:04:22 lr: 0.000001 loss: 0.3060
(0.3161) loss_classifier: 0.0483 (0.0467) loss_box_reg: 0.0704
(0.0666) loss_objectness: 0.0498 (0.0606) loss_rpn_box_reg: 0.1200 (0.1423) time: 1.8967 data: 0.0061 max mem: 5348
Epoch: [14] [110/235] eta: 0:04:02 lr: 0.000001 loss: 0.2892
(0.3124) loss_classifier: 0.0385 (0.0458) loss_box_reg: 0.0630
(0.0655) loss_objectness: 0.0531 (0.0604) loss_rpn_box_reg: 0.11

31 (0.1407) time: 1.9281 data: 0.0062 max mem: 5348
Epoch: [14] [120/235] eta: 0:03:42 lr: 0.000001 loss: 0.2605
(0.3106) loss_classifier: 0.0361 (0.0462) loss_box_reg: 0.0480
(0.0656) loss_objectness: 0.0513 (0.0595) loss_rpn_box_reg: 0.11
03 (0.1393) time: 1.9145 data: 0.0061 max mem: 5348
Epoch: [14] [130/235] eta: 0:03:23 lr: 0.000001 loss: 0.3212
(0.3139) loss_classifier: 0.0430 (0.0461) loss_box_reg: 0.0672
(0.0661) loss_objectness: 0.0513 (0.0597) loss_rpn_box_reg: 0.14
53 (0.1419) time: 1.9146 data: 0.0060 max mem: 5348
Epoch: [14] [140/235] eta: 0:03:05 lr: 0.000001 loss: 0.3415
(0.3170) loss_classifier: 0.0430 (0.0465) loss_box_reg: 0.0685
(0.0667) loss_objectness: 0.0562 (0.0599) loss_rpn_box_reg: 0.14
53 (0.1440) time: 2.0176 data: 0.0059 max mem: 5348
Epoch: [14] [150/235] eta: 0:02:45 lr: 0.000001 loss: 0.3208
(0.3156) loss_classifier: 0.0416 (0.0467) loss_box_reg: 0.0709
(0.0671) loss_objectness: 0.0464 (0.0596) loss_rpn_box_reg: 0.12
76 (0.1421) time: 2.0491 data: 0.0059 max mem: 5348
Epoch: [14] [160/235] eta: 0:02:26 lr: 0.000001 loss: 0.3164
(0.3150) loss_classifier: 0.0445 (0.0471) loss_box_reg: 0.0625
(0.0673) loss_objectness: 0.0491 (0.0596) loss_rpn_box_reg: 0.12
33 (0.1410) time: 2.0232 data: 0.0066 max mem: 5348
Epoch: [14] [170/235] eta: 0:02:07 lr: 0.000001 loss: 0.3282
(0.3165) loss_classifier: 0.0445 (0.0475) loss_box_reg: 0.0524
(0.0680) loss_objectness: 0.0583 (0.0604) loss_rpn_box_reg: 0.10
95 (0.1406) time: 2.0289 data: 0.0067 max mem: 5348
Epoch: [14] [180/235] eta: 0:01:48 lr: 0.000001 loss: 0.3228
(0.3149) loss_classifier: 0.0407 (0.0474) loss_box_reg: 0.0483
(0.0672) loss_objectness: 0.0583 (0.0598) loss_rpn_box_reg: 0.11
39 (0.1405) time: 2.0142 data: 0.0076 max mem: 5348
Epoch: [14] [190/235] eta: 0:01:28 lr: 0.000001 loss: 0.3090
(0.3141) loss_classifier: 0.0367 (0.0474) loss_box_reg: 0.0431
(0.0667) loss_objectness: 0.0366 (0.0588) loss_rpn_box_reg: 0.14
52 (0.1412) time: 2.0027 data: 0.0076 max mem: 5348
Epoch: [14] [200/235] eta: 0:01:08 lr: 0.000001 loss: 0.3050
(0.3133) loss_classifier: 0.0421 (0.0471) loss_box_reg: 0.0543
(0.0671) loss_objectness: 0.0432 (0.0585) loss_rpn_box_reg: 0.13
96 (0.1406) time: 1.9471 data: 0.0063 max mem: 5348
Epoch: [14] [210/235] eta: 0:00:49 lr: 0.000001 loss: 0.3095
(0.3164) loss_classifier: 0.0438 (0.0474) loss_box_reg: 0.0613
(0.0682) loss_objectness: 0.0548 (0.0592) loss_rpn_box_reg: 0.13
72 (0.1416) time: 1.9078 data: 0.0063 max mem: 5348
Epoch: [14] [220/235] eta: 0:00:29 lr: 0.000001 loss: 0.3834
(0.3179) loss_classifier: 0.0442 (0.0473) loss_box_reg: 0.0613
(0.0684) loss_objectness: 0.0583 (0.0594) loss_rpn_box_reg: 0.13
90 (0.1429) time: 1.9208 data: 0.0061 max mem: 5348
Epoch: [14] [230/235] eta: 0:00:09 lr: 0.000001 loss: 0.3114
(0.3177) loss_classifier: 0.0386 (0.0471) loss_box_reg: 0.0540
(0.0682) loss_objectness: 0.0510 (0.0591) loss_rpn_box_reg: 0.13
18 (0.1433) time: 1.9855 data: 0.0061 max mem: 5348
Epoch: [14] [234/235] eta: 0:00:01 lr: 0.000001 loss: 0.3033
(0.3181) loss_classifier: 0.0392 (0.0474) loss_box_reg: 0.0605
(0.0684) loss_objectness: 0.0502 (0.0595) loss_rpn_box_reg: 0.13
18 (0.1428) time: 1.8917 data: 0.0060 max mem: 5348
Epoch: [14] Total time: 0:07:39 (1.9555 s / it)
creating index...
index created!
Test: [0/26] eta: 0:00:34 model_time: 1.0811 (1.0811) evaluator_time: 0.0037 (0.0037) time: 1.3395 data: 0.2514 max mem: 5348
Test: [25/26] eta: 0:00:00 model_time: 0.7545 (0.7770) evaluator_time: 0.0021 (0.0025) time: 0.7648 data: 0.0045 max mem: 5348
Test: Total time: 0:00:20 (0.7978 s / it)

Averaged stats: model_time: 0.7545 (0.7770) evaluator_time: 0.0021 (0.0025)

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.496

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.762

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.523

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.437

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.550

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.361

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.569

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.569

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.512

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.620

creating index...

index created!

Test: [0/235] eta: 0:04:22 model_time: 0.8706 (0.8706) evaluator_time: 0.0033 (0.0033) time: 1.1189 data: 0.2416 max mem: 5348

Test: [100/235] eta: 0:01:53 model_time: 0.8035 (0.8301) evaluator_time: 0.0025 (0.0029) time: 0.8371 data: 0.0059 max mem: 5348

Test: [200/235] eta: 0:00:29 model_time: 0.8159 (0.8323) evaluator_time: 0.0028 (0.0031) time: 0.8337 data: 0.0058 max mem: 5348

Test: [234/235] eta: 0:00:00 model_time: 0.8109 (0.8309) evaluator_time: 0.0022 (0.0031) time: 0.8473 data: 0.0057 max mem: 5348

Test: Total time: 0:03:18 (0.8431 s / it)

Averaged stats: model_time: 0.8109 (0.8309) evaluator_time: 0.0022 (0.0031)

Accumulating evaluation results...

DONE (t=0.08s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.276

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.499

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.278

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.162

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.318

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.226
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.431
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.443
Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000
Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.282
Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.489
Epoch: [15] [0/235] eta: 0:08:28 lr: 0.000000 loss: 0.3129
(0.3129) loss_classifier: 0.0678 (0.0678) loss_box_reg: 0.0654
(0.0654) loss_objectness: 0.0350 (0.0350) loss_rpn_box_reg: 0.1447 (0.1447) time: 2.1647 data: 0.2368 max mem: 5348
Epoch: [15] [10/235] eta: 0:06:56 lr: 0.000000 loss: 0.3466
(0.3667) loss_classifier: 0.0603 (0.0551) loss_box_reg: 0.0654
(0.0775) loss_objectness: 0.0616 (0.0796) loss_rpn_box_reg: 0.1447 (0.1545) time: 1.8525 data: 0.0283 max mem: 5348
Epoch: [15] [20/235] eta: 0:06:59 lr: 0.000000 loss: 0.3197
(0.3297) loss_classifier: 0.0449 (0.0501) loss_box_reg: 0.0496
(0.0672) loss_objectness: 0.0554 (0.0670) loss_rpn_box_reg: 0.1131 (0.1454) time: 1.9384 data: 0.0057 max mem: 5348
Epoch: [15] [30/235] eta: 0:06:57 lr: 0.000000 loss: 0.2935
(0.3140) loss_classifier: 0.0339 (0.0451) loss_box_reg: 0.0483
(0.0609) loss_objectness: 0.0436 (0.0585) loss_rpn_box_reg: 0.1177 (0.1494) time: 2.1392 data: 0.0049 max mem: 5348
Epoch: [15] [40/235] eta: 0:06:35 lr: 0.000000 loss: 0.2354
(0.3021) loss_classifier: 0.0341 (0.0443) loss_box_reg: 0.0467
(0.0621) loss_objectness: 0.0389 (0.0558) loss_rpn_box_reg: 0.1177 (0.1400) time: 2.1076 data: 0.0060 max mem: 5348
Epoch: [15] [50/235] eta: 0:06:13 lr: 0.000000 loss: 0.2735
(0.3065) loss_classifier: 0.0378 (0.0442) loss_box_reg: 0.0410
(0.0631) loss_objectness: 0.0446 (0.0555) loss_rpn_box_reg: 0.1229 (0.1437) time: 1.9962 data: 0.0060 max mem: 5348
Epoch: [15] [60/235] eta: 0:05:50 lr: 0.000000 loss: 0.3212
(0.3153) loss_classifier: 0.0431 (0.0455) loss_box_reg: 0.0530
(0.0643) loss_objectness: 0.0521 (0.0564) loss_rpn_box_reg: 0.1583 (0.1490) time: 1.9475 data: 0.0059 max mem: 5348
Epoch: [15] [70/235] eta: 0:05:24 lr: 0.000000 loss: 0.3274
(0.3192) loss_classifier: 0.0505 (0.0466) loss_box_reg: 0.0817
(0.0688) loss_objectness: 0.0474 (0.0564) loss_rpn_box_reg: 0.1383 (0.1473) time: 1.8204 data: 0.0060 max mem: 5348
Epoch: [15] [80/235] eta: 0:05:09 lr: 0.000000 loss: 0.3290
(0.3220) loss_classifier: 0.0462 (0.0466) loss_box_reg: 0.0558
(0.0675) loss_objectness: 0.0447 (0.0575) loss_rpn_box_reg: 0.1383 (0.1504) time: 1.9814 data: 0.0063 max mem: 5348
Epoch: [15] [90/235] eta: 0:04:48 lr: 0.000000 loss: 0.2950
(0.3192) loss_classifier: 0.0462 (0.0476) loss_box_reg: 0.0531
(0.0695) loss_objectness: 0.0454 (0.0560) loss_rpn_box_reg: 0.1222 (0.1462) time: 2.0930 data: 0.0062 max mem: 5348
Epoch: [15] [100/235] eta: 0:04:27 lr: 0.000000 loss: 0.2901
(0.3210) loss_classifier: 0.0500 (0.0479) loss_box_reg: 0.0559
(0.0699) loss_objectness: 0.0454 (0.0560) loss_rpn_box_reg: 0.1222 (0.1472) time: 1.9071 data: 0.0063 max mem: 5348
Epoch: [15] [110/235] eta: 0:04:07 lr: 0.000000 loss: 0.2911
(0.3220) loss_classifier: 0.0450 (0.0480) loss_box_reg: 0.0559
(0.0700) loss_objectness: 0.0490 (0.0568) loss_rpn_box_reg: 0.1312 (0.1472) time: 1.9201 data: 0.0065 max mem: 5348
Epoch: [15] [120/235] eta: 0:03:46 lr: 0.000000 loss: 0.3061

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(0.3214) loss_classifier: 0.0345 (0.0475) loss_box_reg: 0.0627
(0.0692) loss_objectness: 0.0566 (0.0582) loss_rpn_box_reg: 0.12
81 (0.1466) time: 1.9346 data: 0.0063 max mem: 5348
Epoch: [15] [130/235] eta: 0:03:26 lr: 0.000000 loss: 0.3267
(0.3216) loss_classifier: 0.0374 (0.0482) loss_box_reg: 0.0602
(0.0698) loss_objectness: 0.0588 (0.0587) loss_rpn_box_reg: 0.12
62 (0.1449) time: 1.9100 data: 0.0061 max mem: 5348
Epoch: [15] [140/235] eta: 0:03:06 lr: 0.000000 loss: 0.2868
(0.3172) loss_classifier: 0.0374 (0.0474) loss_box_reg: 0.0544
(0.0688) loss_objectness: 0.0529 (0.0585) loss_rpn_box_reg: 0.11
47 (0.1425) time: 1.9071 data: 0.0066 max mem: 5348
Epoch: [15] [150/235] eta: 0:02:47 lr: 0.000000 loss: 0.3062
(0.3221) loss_classifier: 0.0383 (0.0481) loss_box_reg: 0.0567
(0.0705) loss_objectness: 0.0637 (0.0592) loss_rpn_box_reg: 0.11
47 (0.1442) time: 1.9832 data: 0.0068 max mem: 5348
Epoch: [15] [160/235] eta: 0:02:27 lr: 0.000000 loss: 0.3570
(0.3226) loss_classifier: 0.0439 (0.0490) loss_box_reg: 0.0659
(0.0706) loss_objectness: 0.0637 (0.0602) loss_rpn_box_reg: 0.13
62 (0.1427) time: 2.0216 data: 0.0064 max mem: 5348
Epoch: [15] [170/235] eta: 0:02:08 lr: 0.000000 loss: 0.3027
(0.3188) loss_classifier: 0.0456 (0.0483) loss_box_reg: 0.0500
(0.0696) loss_objectness: 0.0446 (0.0590) loss_rpn_box_reg: 0.12
73 (0.1418) time: 1.9565 data: 0.0062 max mem: 5348
Epoch: [15] [180/235] eta: 0:01:48 lr: 0.000000 loss: 0.2552
(0.3164) loss_classifier: 0.0357 (0.0478) loss_box_reg: 0.0431
(0.0688) loss_objectness: 0.0375 (0.0588) loss_rpn_box_reg: 0.13
08 (0.1410) time: 1.9343 data: 0.0060 max mem: 5348
Epoch: [15] [190/235] eta: 0:01:28 lr: 0.000000 loss: 0.2689
(0.3162) loss_classifier: 0.0353 (0.0477) loss_box_reg: 0.0446
(0.0690) loss_objectness: 0.0423 (0.0584) loss_rpn_box_reg: 0.13
08 (0.1410) time: 1.9481 data: 0.0060 max mem: 5348
Epoch: [15] [200/235] eta: 0:01:08 lr: 0.000000 loss: 0.3533
(0.3188) loss_classifier: 0.0503 (0.0478) loss_box_reg: 0.0629
(0.0684) loss_objectness: 0.0546 (0.0596) loss_rpn_box_reg: 0.13
07 (0.1431) time: 1.9981 data: 0.0060 max mem: 5348
Epoch: [15] [210/235] eta: 0:00:49 lr: 0.000000 loss: 0.3242
(0.3176) loss_classifier: 0.0417 (0.0476) loss_box_reg: 0.0582
(0.0679) loss_objectness: 0.0546 (0.0593) loss_rpn_box_reg: 0.12
16 (0.1428) time: 1.9531 data: 0.0062 max mem: 5348
Epoch: [15] [220/235] eta: 0:00:29 lr: 0.000000 loss: 0.2702
(0.3162) loss_classifier: 0.0409 (0.0471) loss_box_reg: 0.0524
(0.0676) loss_objectness: 0.0393 (0.0588) loss_rpn_box_reg: 0.12
16 (0.1427) time: 1.9207 data: 0.0062 max mem: 5348
Epoch: [15] [230/235] eta: 0:00:09 lr: 0.000000 loss: 0.2905
(0.3171) loss_classifier: 0.0400 (0.0472) loss_box_reg: 0.0532
(0.0679) loss_objectness: 0.0456 (0.0590) loss_rpn_box_reg: 0.13
43 (0.1430) time: 1.9742 data: 0.0061 max mem: 5348
Epoch: [15] [234/235] eta: 0:00:01 lr: 0.000000 loss: 0.2952
(0.3162) loss_classifier: 0.0419 (0.0471) loss_box_reg: 0.0533
(0.0681) loss_objectness: 0.0456 (0.0588) loss_rpn_box_reg: 0.10
14 (0.1422) time: 1.9365 data: 0.0060 max mem: 5348
Epoch: [15] Total time: 0:07:40 (1.9601 s / it)
creating index...
index created!
Test: [ 0/26] eta: 0:00:34 model_time: 1.0687 (1.0687) evaluator_time: 0.0028 (0.0028) time: 1.3121 data: 0.2372 max mem: 5348
Test: [25/26] eta: 0:00:00 model_time: 0.7587 (0.7758) evaluator_time: 0.0019 (0.0024) time: 0.7626 data: 0.0037 max mem: 5348
Test: Total time: 0:00:20 (0.7964 s / it)
Averaged stats: model_time: 0.7587 (0.7758) evaluator_time: 0.0019 (0.0024)
```

Accumulating evaluation results...

DONE (t=0.02s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.496

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.762

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.523

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.437

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.550

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.361

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.569

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.569

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.512

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.620

creating index...

index created!

Test: [0/235] eta: 0:04:24 model_time: 0.8859 (0.8859) evaluator_time: 0.0085 (0.0085) time: 1.1256 data: 0.2275 max mem: 5348

Test: [100/235] eta: 0:01:51 model_time: 0.7831 (0.8122) evaluator_time: 0.0025 (0.0032) time: 0.7953 data: 0.0058 max mem: 5348

Test: [200/235] eta: 0:00:29 model_time: 0.8088 (0.8245) evaluator_time: 0.0022 (0.0031) time: 0.8697 data: 0.0063 max mem: 5348

Test: [234/235] eta: 0:00:00 model_time: 0.8043 (0.8245) evaluator_time: 0.0022 (0.0031) time: 0.8294 data: 0.0059 max mem: 5348

Test: Total time: 0:03:16 (0.8366 s / it)

Averaged stats: model_time: 0.8043 (0.8245) evaluator_time: 0.0022 (0.0031)

Accumulating evaluation results...

DONE (t=0.08s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.249

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.499

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.240

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.208

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.270

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.218

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.403
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.414
Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000
Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.306
Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.450
Epoch: [16] [0/235] eta: 0:08:06 lr: 0.000000 loss: 0.2419
(0.2419) loss_classifier: 0.0566 (0.0566) loss_box_reg: 0.0533
(0.0533) loss_objectness: 0.0489 (0.0489) loss_rpn_box_reg: 0.0831 (0.0831) time: 2.0695 data: 0.2934 max mem: 5348
Epoch: [16] [10/235] eta: 0:07:16 lr: 0.000000 loss: 0.3510
(0.3371) loss_classifier: 0.0566 (0.0563) loss_box_reg: 0.0672
(0.0834) loss_objectness: 0.0489 (0.0675) loss_rpn_box_reg: 0.1099 (0.1299) time: 1.9380 data: 0.0319 max mem: 5348
Epoch: [16] [20/235] eta: 0:06:50 lr: 0.000000 loss: 0.3510
(0.3375) loss_classifier: 0.0455 (0.0518) loss_box_reg: 0.0672
(0.0783) loss_objectness: 0.0605 (0.0668) loss_rpn_box_reg: 0.1417 (0.1406) time: 1.9013 data: 0.0054 max mem: 5348
Epoch: [16] [30/235] eta: 0:06:31 lr: 0.000000 loss: 0.2808
(0.3162) loss_classifier: 0.0392 (0.0492) loss_box_reg: 0.0504
(0.0752) loss_objectness: 0.0468 (0.0617) loss_rpn_box_reg: 0.1174 (0.1302) time: 1.8940 data: 0.0055 max mem: 5348
Epoch: [16] [40/235] eta: 0:06:14 lr: 0.000000 loss: 0.2769
(0.3126) loss_classifier: 0.0424 (0.0497) loss_box_reg: 0.0574
(0.0729) loss_objectness: 0.0468 (0.0614) loss_rpn_box_reg: 0.0953 (0.1286) time: 1.9322 data: 0.0061 max mem: 5348
Epoch: [16] [50/235] eta: 0:05:54 lr: 0.000000 loss: 0.3019
(0.3104) loss_classifier: 0.0479 (0.0493) loss_box_reg: 0.0650
(0.0737) loss_objectness: 0.0513 (0.0603) loss_rpn_box_reg: 0.1099 (0.1271) time: 1.9235 data: 0.0062 max mem: 5348
Epoch: [16] [60/235] eta: 0:05:32 lr: 0.000000 loss: 0.3028
(0.3100) loss_classifier: 0.0382 (0.0489) loss_box_reg: 0.0644
(0.0724) loss_objectness: 0.0422 (0.0588) loss_rpn_box_reg: 0.1292 (0.1300) time: 1.8613 data: 0.0062 max mem: 5348
Epoch: [16] [70/235] eta: 0:05:14 lr: 0.000000 loss: 0.3028
(0.3117) loss_classifier: 0.0382 (0.0479) loss_box_reg: 0.0507
(0.0703) loss_objectness: 0.0422 (0.0586) loss_rpn_box_reg: 0.1407 (0.1348) time: 1.8825 data: 0.0061 max mem: 5348
Epoch: [16] [80/235] eta: 0:04:54 lr: 0.000000 loss: 0.3608
(0.3149) loss_classifier: 0.0480 (0.0484) loss_box_reg: 0.0558
(0.0711) loss_objectness: 0.0455 (0.0590) loss_rpn_box_reg: 0.1553 (0.1364) time: 1.9054 data: 0.0060 max mem: 5348
Epoch: [16] [90/235] eta: 0:04:35 lr: 0.000000 loss: 0.3395
(0.3160) loss_classifier: 0.0480 (0.0488) loss_box_reg: 0.0640
(0.0716) loss_objectness: 0.0557 (0.0596) loss_rpn_box_reg: 0.1255 (0.1361) time: 1.8714 data: 0.0064 max mem: 5348
Epoch: [16] [100/235] eta: 0:04:19 lr: 0.000000 loss: 0.3115
(0.3149) loss_classifier: 0.0402 (0.0478) loss_box_reg: 0.0621
(0.0696) loss_objectness: 0.0559 (0.0594) loss_rpn_box_reg: 0.1308 (0.1381) time: 2.0117 data: 0.0067 max mem: 5348
Epoch: [16] [110/235] eta: 0:04:02 lr: 0.000000 loss: 0.3274
(0.3191) loss_classifier: 0.0371 (0.0486) loss_box_reg: 0.0510
(0.0709) loss_objectness: 0.0559 (0.0599) loss_rpn_box_reg: 0.1376 (0.1398) time: 2.1124 data: 0.0064 max mem: 5348
Epoch: [16] [120/235] eta: 0:03:43 lr: 0.000000 loss: 0.3322
(0.3236) loss_classifier: 0.0523 (0.0494) loss_box_reg: 0.0540
(0.0711) loss_objectness: 0.0628 (0.0618) loss_rpn_box_reg: 0.13

76 (0.1413) time: 2.0602 data: 0.0062 max mem: 5348
Epoch: [16] [130/235] eta: 0:03:25 lr: 0.000000 loss: 0.3237
(0.3235) loss_classifier: 0.0394 (0.0488) loss_box_reg: 0.0442
(0.0697) loss_objectness: 0.0486 (0.0606) loss_rpn_box_reg: 0.13
97 (0.1444) time: 2.0989 data: 0.0064 max mem: 5348
Epoch: [16] [140/235] eta: 0:03:06 lr: 0.000000 loss: 0.3237
(0.3251) loss_classifier: 0.0394 (0.0488) loss_box_reg: 0.0552
(0.0699) loss_objectness: 0.0484 (0.0606) loss_rpn_box_reg: 0.12
91 (0.1458) time: 2.0678 data: 0.0064 max mem: 5348
Epoch: [16] [150/235] eta: 0:02:46 lr: 0.000000 loss: 0.2944
(0.3215) loss_classifier: 0.0405 (0.0480) loss_box_reg: 0.0594
(0.0690) loss_objectness: 0.0511 (0.0600) loss_rpn_box_reg: 0.12
77 (0.1445) time: 1.9715 data: 0.0068 max mem: 5348
Epoch: [16] [160/235] eta: 0:02:27 lr: 0.000000 loss: 0.3068
(0.3213) loss_classifier: 0.0297 (0.0476) loss_box_reg: 0.0416
(0.0681) loss_objectness: 0.0511 (0.0603) loss_rpn_box_reg: 0.14
79 (0.1454) time: 1.9697 data: 0.0068 max mem: 5348
Epoch: [16] [170/235] eta: 0:02:07 lr: 0.000000 loss: 0.3253
(0.3217) loss_classifier: 0.0498 (0.0480) loss_box_reg: 0.0592
(0.0686) loss_objectness: 0.0436 (0.0598) loss_rpn_box_reg: 0.14
79 (0.1452) time: 1.9799 data: 0.0063 max mem: 5348
Epoch: [16] [180/235] eta: 0:01:48 lr: 0.000000 loss: 0.2840
(0.3204) loss_classifier: 0.0517 (0.0484) loss_box_reg: 0.0592
(0.0686) loss_objectness: 0.0428 (0.0593) loss_rpn_box_reg: 0.11
98 (0.1441) time: 1.9912 data: 0.0065 max mem: 5348
Epoch: [16] [190/235] eta: 0:01:28 lr: 0.000000 loss: 0.2708
(0.3201) loss_classifier: 0.0501 (0.0488) loss_box_reg: 0.0599
(0.0692) loss_objectness: 0.0428 (0.0589) loss_rpn_box_reg: 0.11
98 (0.1431) time: 1.9366 data: 0.0066 max mem: 5348
Epoch: [16] [200/235] eta: 0:01:08 lr: 0.000000 loss: 0.2700
(0.3179) loss_classifier: 0.0423 (0.0482) loss_box_reg: 0.0599
(0.0683) loss_objectness: 0.0432 (0.0586) loss_rpn_box_reg: 0.11
04 (0.1429) time: 1.8829 data: 0.0062 max mem: 5348
Epoch: [16] [210/235] eta: 0:00:48 lr: 0.000000 loss: 0.2575
(0.3174) loss_classifier: 0.0414 (0.0479) loss_box_reg: 0.0474
(0.0677) loss_objectness: 0.0469 (0.0590) loss_rpn_box_reg: 0.10
54 (0.1428) time: 1.8793 data: 0.0063 max mem: 5348
Epoch: [16] [220/235] eta: 0:00:29 lr: 0.000000 loss: 0.2575
(0.3157) loss_classifier: 0.0298 (0.0474) loss_box_reg: 0.0355
(0.0667) loss_objectness: 0.0532 (0.0588) loss_rpn_box_reg: 0.13
63 (0.1427) time: 1.8724 data: 0.0065 max mem: 5348
Epoch: [16] [230/235] eta: 0:00:09 lr: 0.000000 loss: 0.2642
(0.3171) loss_classifier: 0.0352 (0.0479) loss_box_reg: 0.0462
(0.0682) loss_objectness: 0.0593 (0.0594) loss_rpn_box_reg: 0.09
83 (0.1416) time: 1.9086 data: 0.0075 max mem: 5348
Epoch: [16] [234/235] eta: 0:00:01 lr: 0.000000 loss: 0.3150
(0.3174) loss_classifier: 0.0352 (0.0476) loss_box_reg: 0.0484
(0.0678) loss_objectness: 0.0593 (0.0593) loss_rpn_box_reg: 0.09
87 (0.1427) time: 1.8489 data: 0.0074 max mem: 5348
Epoch: [16] Total time: 0:07:37 (1.9470 s / it)
creating index...
index created!
Test: [0/26] eta: 0:00:34 model_time: 1.0784 (1.0784) evaluator_time: 0.0028 (0.0028) time: 1.3345 data: 0.2499 max mem: 5348
Test: [25/26] eta: 0:00:00 model_time: 0.7585 (0.7731) evaluator_time: 0.0022 (0.0026) time: 0.7622 data: 0.0058 max mem: 5348
Test: Total time: 0:00:20 (0.7939 s / it)
Averaged stats: model_time: 0.7585 (0.7731) evaluator_time: 0.0022 (0.0026)
Accumulating evaluation results...
DONE (t=0.02s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.496
 Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.762
 Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.523
 Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000
 Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.437
 Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.550
 Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.361
 Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.569
 Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.569
 Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000
 Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.512
 Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.620

creating index...

index created!

Test: [0/235] eta: 0:04:57 model_time: 1.0425 (1.0425) evaluator_time: 0.0032 (0.0032) time: 1.2672 data: 0.2189 max mem: 5348

Test: [100/235] eta: 0:01:52 model_time: 0.7705 (0.8209) evaluator_time: 0.0027 (0.0030) time: 0.8292 data: 0.0058 max mem: 5348

Test: [200/235] eta: 0:00:29 model_time: 0.7992 (0.8271) evaluator_time: 0.0024 (0.0030) time: 0.8420 data: 0.0058 max mem: 5348

Test: [234/235] eta: 0:00:00 model_time: 0.8150 (0.8269) evaluator_time: 0.0023 (0.0031) time: 0.8221 data: 0.0056 max mem: 5348

Test: Total time: 0:03:17 (0.8386 s / it)

Averaged stats: model_time: 0.8150 (0.8269) evaluator_time: 0.0023 (0.0031)

Accumulating evaluation results...

DONE (t=0.09s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.268
 Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.508
 Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.256
 Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000
 Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.229
 Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.289
 Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.221
 Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.420

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.433
Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000
Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.325
Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.471
Epoch: [17] [0/235] eta: 0:07:47 lr: 0.000000 loss: 0.4813
(0.4813) loss_classifier: 0.0343 (0.0343) loss_box_reg: 0.0217
(0.0217) loss_objectness: 0.1310 (0.1310) loss_rpn_box_reg: 0.2944 (0.2944) time: 1.9895 data: 0.2428 max mem: 5348
Epoch: [17] [10/235] eta: 0:07:15 lr: 0.000000 loss: 0.3389
(0.3420) loss_classifier: 0.0375 (0.0427) loss_box_reg: 0.0545
(0.0672) loss_objectness: 0.0502 (0.0659) loss_rpn_box_reg: 0.1688 (0.1661) time: 1.9338 data: 0.0286 max mem: 5348
Epoch: [17] [20/235] eta: 0:06:50 lr: 0.000000 loss: 0.3060
(0.3357) loss_classifier: 0.0375 (0.0420) loss_box_reg: 0.0545
(0.0661) loss_objectness: 0.0502 (0.0651) loss_rpn_box_reg: 0.1554 (0.1625) time: 1.9066 data: 0.0053 max mem: 5348
Epoch: [17] [30/235] eta: 0:06:33 lr: 0.000000 loss: 0.3305
(0.3214) loss_classifier: 0.0430 (0.0441) loss_box_reg: 0.0575
(0.0680) loss_objectness: 0.0558 (0.0601) loss_rpn_box_reg: 0.1223 (0.1492) time: 1.9117 data: 0.0047 max mem: 5348
Epoch: [17] [40/235] eta: 0:06:06 lr: 0.000000 loss: 0.3305
(0.3250) loss_classifier: 0.0460 (0.0457) loss_box_reg: 0.0635
(0.0731) loss_objectness: 0.0542 (0.0600) loss_rpn_box_reg: 0.1190 (0.1462) time: 1.8496 data: 0.0060 max mem: 5348
Epoch: [17] [50/235] eta: 0:05:47 lr: 0.000000 loss: 0.3349
(0.3389) loss_classifier: 0.0434 (0.0482) loss_box_reg: 0.0607
(0.0745) loss_objectness: 0.0689 (0.0652) loss_rpn_box_reg: 0.1320 (0.1510) time: 1.8109 data: 0.0062 max mem: 5348
Epoch: [17] [60/235] eta: 0:05:31 lr: 0.000000 loss: 0.2801
(0.3272) loss_classifier: 0.0399 (0.0463) loss_box_reg: 0.0448
(0.0697) loss_objectness: 0.0502 (0.0611) loss_rpn_box_reg: 0.1268 (0.1502) time: 1.9177 data: 0.0062 max mem: 5348
Epoch: [17] [70/235] eta: 0:05:11 lr: 0.000000 loss: 0.2789
(0.3295) loss_classifier: 0.0441 (0.0474) loss_box_reg: 0.0494
(0.0734) loss_objectness: 0.0434 (0.0609) loss_rpn_box_reg: 0.1172 (0.1477) time: 1.9064 data: 0.0060 max mem: 5348
Epoch: [17] [80/235] eta: 0:04:51 lr: 0.000000 loss: 0.3101
(0.3323) loss_classifier: 0.0469 (0.0480) loss_box_reg: 0.0862
(0.0746) loss_objectness: 0.0593 (0.0630) loss_rpn_box_reg: 0.1269 (0.1467) time: 1.8492 data: 0.0060 max mem: 5348
Epoch: [17] [90/235] eta: 0:04:34 lr: 0.000000 loss: 0.3101
(0.3297) loss_classifier: 0.0447 (0.0476) loss_box_reg: 0.0679
(0.0740) loss_objectness: 0.0600 (0.0617) loss_rpn_box_reg: 0.1324 (0.1464) time: 1.9306 data: 0.0059 max mem: 5348
Epoch: [17] [100/235] eta: 0:04:15 lr: 0.000000 loss: 0.3163
(0.3280) loss_classifier: 0.0447 (0.0484) loss_box_reg: 0.0636
(0.0740) loss_objectness: 0.0500 (0.0608) loss_rpn_box_reg: 0.1267 (0.1448) time: 1.9325 data: 0.0060 max mem: 5348
Epoch: [17] [110/235] eta: 0:03:55 lr: 0.000000 loss: 0.3227
(0.3259) loss_classifier: 0.0506 (0.0486) loss_box_reg: 0.0563
(0.0726) loss_objectness: 0.0496 (0.0598) loss_rpn_box_reg: 0.1260 (0.1449) time: 1.8152 data: 0.0066 max mem: 5348
Epoch: [17] [120/235] eta: 0:03:36 lr: 0.000000 loss: 0.3040
(0.3228) loss_classifier: 0.0481 (0.0490) loss_box_reg: 0.0563
(0.0730) loss_objectness: 0.0489 (0.0599) loss_rpn_box_reg: 0.1104 (0.1409) time: 1.8246 data: 0.0066 max mem: 5348
Epoch: [17] [130/235] eta: 0:03:17 lr: 0.000000 loss: 0.3109

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(0.3222) loss_classifier: 0.0490 (0.0490) loss_box_reg: 0.0690
(0.0729) loss_objectness: 0.0566 (0.0598) loss_rpn_box_reg: 0.10
79 (0.1404) time: 1.8756 data: 0.0061 max mem: 5348
Epoch: [17] [140/235] eta: 0:02:59 lr: 0.000000 loss: 0.3109
(0.3201) loss_classifier: 0.0506 (0.0491) loss_box_reg: 0.0625
(0.0724) loss_objectness: 0.0436 (0.0590) loss_rpn_box_reg: 0.11
95 (0.1396) time: 1.9454 data: 0.0061 max mem: 5348
Epoch: [17] [150/235] eta: 0:02:40 lr: 0.000000 loss: 0.3272
(0.3222) loss_classifier: 0.0346 (0.0489) loss_box_reg: 0.0449
(0.0721) loss_objectness: 0.0420 (0.0601) loss_rpn_box_reg: 0.13
24 (0.1410) time: 1.9485 data: 0.0062 max mem: 5348
Epoch: [17] [160/235] eta: 0:02:21 lr: 0.000000 loss: 0.3284
(0.3222) loss_classifier: 0.0346 (0.0491) loss_box_reg: 0.0446
(0.0721) loss_objectness: 0.0469 (0.0598) loss_rpn_box_reg: 0.13
49 (0.1413) time: 1.9038 data: 0.0062 max mem: 5348
Epoch: [17] [170/235] eta: 0:02:03 lr: 0.000000 loss: 0.3196
(0.3221) loss_classifier: 0.0362 (0.0488) loss_box_reg: 0.0530
(0.0714) loss_objectness: 0.0508 (0.0608) loss_rpn_box_reg: 0.12
83 (0.1412) time: 1.9460 data: 0.0062 max mem: 5348
Epoch: [17] [180/235] eta: 0:01:44 lr: 0.000000 loss: 0.3015
(0.3212) loss_classifier: 0.0362 (0.0487) loss_box_reg: 0.0506
(0.0712) loss_objectness: 0.0554 (0.0607) loss_rpn_box_reg: 0.10
64 (0.1406) time: 1.9295 data: 0.0064 max mem: 5348
Epoch: [17] [190/235] eta: 0:01:26 lr: 0.000000 loss: 0.2687
(0.3195) loss_classifier: 0.0354 (0.0482) loss_box_reg: 0.0441
(0.0704) loss_objectness: 0.0386 (0.0593) loss_rpn_box_reg: 0.11
92 (0.1415) time: 2.0485 data: 0.0074 max mem: 5348
Epoch: [17] [200/235] eta: 0:01:07 lr: 0.000000 loss: 0.2725
(0.3181) loss_classifier: 0.0345 (0.0476) loss_box_reg: 0.0512
(0.0696) loss_objectness: 0.0367 (0.0587) loss_rpn_box_reg: 0.14
07 (0.1422) time: 2.1658 data: 0.0072 max mem: 5348
Epoch: [17] [210/235] eta: 0:00:48 lr: 0.000000 loss: 0.2760
(0.3170) loss_classifier: 0.0368 (0.0475) loss_box_reg: 0.0558
(0.0692) loss_objectness: 0.0447 (0.0585) loss_rpn_box_reg: 0.13
09 (0.1417) time: 2.1005 data: 0.0062 max mem: 5348
Epoch: [17] [220/235] eta: 0:00:28 lr: 0.000000 loss: 0.2875
(0.3177) loss_classifier: 0.0400 (0.0474) loss_box_reg: 0.0635
(0.0690) loss_objectness: 0.0550 (0.0589) loss_rpn_box_reg: 0.11
77 (0.1424) time: 1.9574 data: 0.0064 max mem: 5348
Epoch: [17] [230/235] eta: 0:00:09 lr: 0.000000 loss: 0.3107
(0.3151) loss_classifier: 0.0307 (0.0468) loss_box_reg: 0.0472
(0.0679) loss_objectness: 0.0508 (0.0585) loss_rpn_box_reg: 0.14
20 (0.1419) time: 1.8441 data: 0.0062 max mem: 5348
Epoch: [17] [234/235] eta: 0:00:01 lr: 0.000000 loss: 0.3036
(0.3154) loss_classifier: 0.0350 (0.0471) loss_box_reg: 0.0484
(0.0682) loss_objectness: 0.0382 (0.0582) loss_rpn_box_reg: 0.14
20 (0.1420) time: 1.8181 data: 0.0060 max mem: 5348
Epoch: [17] Total time: 0:07:30 (1.9172 s / it)
creating index...
index created!
Test: [ 0/26] eta: 0:00:34 model_time: 1.0802 (1.0802) evaluator_time: 0.0028 (0.0028) time: 1.3316 data: 0.2461 max mem: 5348
Test: [25/26] eta: 0:00:00 model_time: 0.7563 (0.7783) evaluator_time: 0.0021 (0.0025) time: 0.7665 data: 0.0045 max mem: 5348
Test: Total time: 0:00:20 (0.7990 s / it)
Averaged stats: model_time: 0.7563 (0.7783) evaluator_time: 0.0021 (0.0025)
Accumulating evaluation results...
DONE (t=0.02s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
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00 ] = 0.496
Average Precision (AP) @[ IoU=0.50      | area=   all | maxDets=1
00 ] = 0.762
Average Precision (AP) @[ IoU=0.75      | area=   all | maxDets=1
00 ] = 0.523
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.437
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.550
Average Recall    (AR) @[ IoU=0.50:0.95 | area=   all | maxDets=
1 ] = 0.361
Average Recall    (AR) @[ IoU=0.50:0.95 | area=   all | maxDets=
10 ] = 0.569
Average Recall    (AR) @[ IoU=0.50:0.95 | area=   all | maxDets=1
00 ] = 0.569
Average Recall    (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Recall    (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.512
Average Recall    (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.620
creating index...
index created!
Test: [ 0/235] eta: 0:04:33 model_time: 0.8928 (0.8928) evalua
tor_time: 0.0041 (0.0041) time: 1.1653 data: 0.2664 max mem: 534
8
Test: [100/235] eta: 0:01:54 model_time: 0.7986 (0.8380) evalua
tor_time: 0.0024 (0.0031) time: 0.8522 data: 0.0064 max mem: 534
8
Test: [200/235] eta: 0:00:29 model_time: 0.8044 (0.8302) evalua
tor_time: 0.0023 (0.0033) time: 0.8385 data: 0.0060 max mem: 534
8
Test: [234/235] eta: 0:00:00 model_time: 0.7987 (0.8261) evalua
tor_time: 0.0022 (0.0033) time: 0.7998 data: 0.0078 max mem: 534
8
Test: Total time: 0:03:17 (0.8389 s / it)
Averaged stats: model_time: 0.7987 (0.8261) evaluator_time: 0.0022
(0.0033)
Accumulating evaluation results...
DONE (t=0.08s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area=   all | maxDets=1
00 ] = 0.281
Average Precision (AP) @[ IoU=0.50      | area=   all | maxDets=1
00 ] = 0.511
Average Precision (AP) @[ IoU=0.75      | area=   all | maxDets=1
00 ] = 0.276
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.241
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.305
Average Recall    (AR) @[ IoU=0.50:0.95 | area=   all | maxDets=
1 ] = 0.219
Average Recall    (AR) @[ IoU=0.50:0.95 | area=   all | maxDets=
10 ] = 0.430
Average Recall    (AR) @[ IoU=0.50:0.95 | area=   all | maxDets=1
00 ] = 0.448

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Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = 0.000
Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.369
Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.478
Epoch: [18] [0/235] eta: 0:08:18 lr: 0.000000 loss: 0.4739
(0.4739) loss_classifier: 0.0627 (0.0627) loss_box_reg: 0.0752
(0.0752) loss_objectness: 0.0860 (0.0860) loss_rpn_box_reg: 0.2500 (0.2500) time: 2.1203 data: 0.2197 max mem: 5348
Epoch: [18] [10/235] eta: 0:07:07 lr: 0.000000 loss: 0.3284
(0.3255) loss_classifier: 0.0451 (0.0513) loss_box_reg: 0.0752
(0.0774) loss_objectness: 0.0688 (0.0657) loss_rpn_box_reg: 0.1321 (0.1310) time: 1.8980 data: 0.0276 max mem: 5348
Epoch: [18] [20/235] eta: 0:06:51 lr: 0.000000 loss: 0.2986
(0.3184) loss_classifier: 0.0441 (0.0480) loss_box_reg: 0.0562
(0.0744) loss_objectness: 0.0498 (0.0598) loss_rpn_box_reg: 0.1304 (0.1362) time: 1.9041 data: 0.0061 max mem: 5348
Epoch: [18] [30/235] eta: 0:06:36 lr: 0.000000 loss: 0.2982
(0.3182) loss_classifier: 0.0413 (0.0475) loss_box_reg: 0.0624
(0.0717) loss_objectness: 0.0498 (0.0592) loss_rpn_box_reg: 0.1269 (0.1397) time: 1.9548 data: 0.0058 max mem: 5348
Epoch: [18] [40/235] eta: 0:06:18 lr: 0.000000 loss: 0.3179
(0.3238) loss_classifier: 0.0413 (0.0483) loss_box_reg: 0.0664
(0.0752) loss_objectness: 0.0570 (0.0606) loss_rpn_box_reg: 0.1234 (0.1397) time: 1.9661 data: 0.0075 max mem: 5348
Epoch: [18] [50/235] eta: 0:05:59 lr: 0.000000 loss: 0.3179
(0.3260) loss_classifier: 0.0427 (0.0476) loss_box_reg: 0.0748
(0.0728) loss_objectness: 0.0577 (0.0620) loss_rpn_box_reg: 0.1284 (0.1435) time: 1.9605 data: 0.0068 max mem: 5348
Epoch: [18] [60/235] eta: 0:05:37 lr: 0.000000 loss: 0.3100
(0.3255) loss_classifier: 0.0427 (0.0489) loss_box_reg: 0.0631
(0.0733) loss_objectness: 0.0512 (0.0612) loss_rpn_box_reg: 0.1334 (0.1420) time: 1.9030 data: 0.0064 max mem: 5348
Epoch: [18] [70/235] eta: 0:05:19 lr: 0.000000 loss: 0.3171
(0.3231) loss_classifier: 0.0480 (0.0481) loss_box_reg: 0.0631
(0.0739) loss_objectness: 0.0542 (0.0615) loss_rpn_box_reg: 0.1242 (0.1397) time: 1.9069 data: 0.0061 max mem: 5348
Epoch: [18] [80/235] eta: 0:04:59 lr: 0.000000 loss: 0.3160
(0.3235) loss_classifier: 0.0349 (0.0482) loss_box_reg: 0.0495
(0.0730) loss_objectness: 0.0452 (0.0611) loss_rpn_box_reg: 0.1245 (0.1411) time: 1.9371 data: 0.0061 max mem: 5348
Epoch: [18] [90/235] eta: 0:04:39 lr: 0.000000 loss: 0.3205
(0.3247) loss_classifier: 0.0381 (0.0480) loss_box_reg: 0.0495
(0.0718) loss_objectness: 0.0505 (0.0619) loss_rpn_box_reg: 0.1590 (0.1430) time: 1.9070 data: 0.0062 max mem: 5348
Epoch: [18] [100/235] eta: 0:04:21 lr: 0.000000 loss: 0.2935
(0.3226) loss_classifier: 0.0420 (0.0482) loss_box_reg: 0.0666
(0.0714) loss_objectness: 0.0441 (0.0605) loss_rpn_box_reg: 0.1546 (0.1425) time: 1.9702 data: 0.0061 max mem: 5348
Epoch: [18] [110/235] eta: 0:04:01 lr: 0.000000 loss: 0.2880
(0.3224) loss_classifier: 0.0363 (0.0473) loss_box_reg: 0.0587
(0.0702) loss_objectness: 0.0441 (0.0608) loss_rpn_box_reg: 0.1558 (0.1441) time: 1.9531 data: 0.0061 max mem: 5348
Epoch: [18] [120/235] eta: 0:03:41 lr: 0.000000 loss: 0.3007
(0.3191) loss_classifier: 0.0363 (0.0469) loss_box_reg: 0.0461
(0.0689) loss_objectness: 0.0481 (0.0600) loss_rpn_box_reg: 0.1567 (0.1433) time: 1.8785 data: 0.0061 max mem: 5348
Epoch: [18] [130/235] eta: 0:03:23 lr: 0.000000 loss: 0.2880
(0.3188) loss_classifier: 0.0396 (0.0468) loss_box_reg: 0.0478
(0.0679) loss_objectness: 0.0466 (0.0598) loss_rpn_box_reg: 0.11

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84 (0.1443) time: 1.9478 data: 0.0064 max mem: 5348
Epoch: [18] [140/235] eta: 0:03:03 lr: 0.000000 loss: 0.3261
(0.3217) loss_classifier: 0.0472 (0.0476) loss_box_reg: 0.0637
(0.0694) loss_objectness: 0.0527 (0.0599) loss_rpn_box_reg: 0.12
93 (0.1448) time: 1.9725 data: 0.0064 max mem: 5348
Epoch: [18] [150/235] eta: 0:02:43 lr: 0.000000 loss: 0.3216
(0.3206) loss_classifier: 0.0437 (0.0479) loss_box_reg: 0.0638
(0.0703) loss_objectness: 0.0564 (0.0595) loss_rpn_box_reg: 0.12
64 (0.1429) time: 1.8659 data: 0.0064 max mem: 5348
Epoch: [18] [160/235] eta: 0:02:24 lr: 0.000000 loss: 0.3170
(0.3213) loss_classifier: 0.0422 (0.0479) loss_box_reg: 0.0642
(0.0703) loss_objectness: 0.0522 (0.0592) loss_rpn_box_reg: 0.12
64 (0.1440) time: 1.8585 data: 0.0063 max mem: 5348
Epoch: [18] [170/235] eta: 0:02:05 lr: 0.000000 loss: 0.3379
(0.3233) loss_classifier: 0.0421 (0.0482) loss_box_reg: 0.0612
(0.0708) loss_objectness: 0.0584 (0.0595) loss_rpn_box_reg: 0.15
15 (0.1448) time: 1.9224 data: 0.0062 max mem: 5348
Epoch: [18] [180/235] eta: 0:01:46 lr: 0.000000 loss: 0.2893
(0.3208) loss_classifier: 0.0351 (0.0476) loss_box_reg: 0.0397
(0.0693) loss_objectness: 0.0534 (0.0593) loss_rpn_box_reg: 0.13
59 (0.1446) time: 1.9902 data: 0.0064 max mem: 5348
Epoch: [18] [190/235] eta: 0:01:26 lr: 0.000000 loss: 0.2655
(0.3191) loss_classifier: 0.0415 (0.0475) loss_box_reg: 0.0507
(0.0689) loss_objectness: 0.0431 (0.0589) loss_rpn_box_reg: 0.13
05 (0.1438) time: 1.9443 data: 0.0063 max mem: 5348
Epoch: [18] [200/235] eta: 0:01:07 lr: 0.000000 loss: 0.2453
(0.3163) loss_classifier: 0.0438 (0.0473) loss_box_reg: 0.0549
(0.0686) loss_objectness: 0.0461 (0.0583) loss_rpn_box_reg: 0.11
26 (0.1421) time: 1.8797 data: 0.0062 max mem: 5348
Epoch: [18] [210/235] eta: 0:00:48 lr: 0.000000 loss: 0.2672
(0.3151) loss_classifier: 0.0450 (0.0475) loss_box_reg: 0.0540
(0.0685) loss_objectness: 0.0459 (0.0578) loss_rpn_box_reg: 0.11
40 (0.1413) time: 1.8674 data: 0.0062 max mem: 5348
Epoch: [18] [220/235] eta: 0:00:28 lr: 0.000000 loss: 0.2973
(0.3159) loss_classifier: 0.0490 (0.0475) loss_box_reg: 0.0568
(0.0687) loss_objectness: 0.0601 (0.0582) loss_rpn_box_reg: 0.12
81 (0.1415) time: 1.8717 data: 0.0062 max mem: 5348
Epoch: [18] [230/235] eta: 0:00:09 lr: 0.000000 loss: 0.3686
(0.3168) loss_classifier: 0.0417 (0.0476) loss_box_reg: 0.0553
(0.0685) loss_objectness: 0.0601 (0.0583) loss_rpn_box_reg: 0.13
35 (0.1424) time: 1.9363 data: 0.0060 max mem: 5348
Epoch: [18] [234/235] eta: 0:00:01 lr: 0.000000 loss: 0.2973
(0.3158) loss_classifier: 0.0399 (0.0473) loss_box_reg: 0.0414
(0.0682) loss_objectness: 0.0532 (0.0582) loss_rpn_box_reg: 0.12
81 (0.1422) time: 1.8610 data: 0.0059 max mem: 5348
Epoch: [18] Total time: 0:07:30 (1.9169 s / it)
creating index...
index created!
Test: [ 0/26] eta: 0:00:34 model_time: 1.0565 (1.0565) evaluator_time: 0.0032 (0.0032) time: 1.3182 data: 0.2551 max mem: 5348
Test: [25/26] eta: 0:00:00 model_time: 0.7605 (0.7733) evaluator_time: 0.0022 (0.0026) time: 0.7633 data: 0.0043 max mem: 5348
Test: Total time: 0:00:20 (0.7940 s / it)
Averaged stats: model_time: 0.7605 (0.7733) evaluator_time: 0.0022 (0.0026)
Accumulating evaluation results...
DONE (t=0.02s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.496
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
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00 ] = 0.762
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.523
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.437
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.550
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.361
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.569
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.569
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.512
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.620
creating index...
index created!
Test: [ 0/235] eta: 0:04:23 model_time: 0.8514 (0.8514) evalua
tor_time: 0.0061 (0.0061) time: 1.1234 data: 0.2636 max mem: 534
8
Test: [100/235] eta: 0:01:52 model_time: 0.7946 (0.8211) evalua
tor_time: 0.0028 (0.0032) time: 0.8305 data: 0.0058 max mem: 534
8
Test: [200/235] eta: 0:00:29 model_time: 0.8039 (0.8296) evalua
tor_time: 0.0027 (0.0032) time: 0.8491 data: 0.0063 max mem: 534
8
Test: [234/235] eta: 0:00:00 model_time: 0.8070 (0.8267) evalua
tor_time: 0.0026 (0.0031) time: 0.8166 data: 0.0060 max mem: 534
8
Test: Total time: 0:03:17 (0.8385 s / it)
Averaged stats: model_time: 0.8070 (0.8267) evaluator_time: 0.0026
(0.0031)
Accumulating evaluation results...
DONE (t=0.09s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.263
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.496
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.265
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.231
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.282
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.214
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.411
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.428
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000

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Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.338
Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.456
Epoch: [19] [0/235] eta: 0:08:12 lr: 0.000000 loss: 0.4268
(0.4268) loss_classifier: 0.0363 (0.0363) loss_box_reg: 0.0660
(0.0660) loss_objectness: 0.0879 (0.0879) loss_rpn_box_reg: 0.2366 (0.2366) time: 2.0938 data: 0.2361 max mem: 5348
Epoch: [19] [10/235] eta: 0:07:05 lr: 0.000000 loss: 0.3576
(0.3175) loss_classifier: 0.0593 (0.0490) loss_box_reg: 0.0826
(0.0716) loss_objectness: 0.0589 (0.0617) loss_rpn_box_reg: 0.1105 (0.1352) time: 1.8895 data: 0.0289 max mem: 5348
Epoch: [19] [20/235] eta: 0:07:07 lr: 0.000000 loss: 0.3361
(0.3265) loss_classifier: 0.0534 (0.0500) loss_box_reg: 0.0821
(0.0746) loss_objectness: 0.0551 (0.0584) loss_rpn_box_reg: 0.1121 (0.1436) time: 1.9818 data: 0.0062 max mem: 5348
Epoch: [19] [30/235] eta: 0:06:56 lr: 0.000000 loss: 0.3234
(0.3264) loss_classifier: 0.0443 (0.0502) loss_box_reg: 0.0751
(0.0761) loss_objectness: 0.0424 (0.0615) loss_rpn_box_reg: 0.1220 (0.1386) time: 2.1123 data: 0.0051 max mem: 5348
Epoch: [19] [40/235] eta: 0:06:34 lr: 0.000000 loss: 0.3132
(0.3375) loss_classifier: 0.0448 (0.0533) loss_box_reg: 0.0638
(0.0799) loss_objectness: 0.0635 (0.0661) loss_rpn_box_reg: 0.1106 (0.1382) time: 2.0608 data: 0.0063 max mem: 5348
Epoch: [19] [50/235] eta: 0:06:14 lr: 0.000000 loss: 0.3219
(0.3388) loss_classifier: 0.0624 (0.0530) loss_box_reg: 0.0808
(0.0806) loss_objectness: 0.0733 (0.0669) loss_rpn_box_reg: 0.1290 (0.1383) time: 2.0119 data: 0.0064 max mem: 5348
Epoch: [19] [60/235] eta: 0:05:49 lr: 0.000000 loss: 0.3127
(0.3317) loss_classifier: 0.0449 (0.0521) loss_box_reg: 0.0734
(0.0787) loss_objectness: 0.0488 (0.0660) loss_rpn_box_reg: 0.1171 (0.1350) time: 1.9382 data: 0.0061 max mem: 5348
Epoch: [19] [70/235] eta: 0:05:25 lr: 0.000000 loss: 0.3097
(0.3299) loss_classifier: 0.0449 (0.0517) loss_box_reg: 0.0713
(0.0769) loss_objectness: 0.0560 (0.0658) loss_rpn_box_reg: 0.1185 (0.1354) time: 1.8454 data: 0.0061 max mem: 5348
Epoch: [19] [80/235] eta: 0:05:06 lr: 0.000000 loss: 0.3002
(0.3268) loss_classifier: 0.0372 (0.0499) loss_box_reg: 0.0576
(0.0739) loss_objectness: 0.0502 (0.0642) loss_rpn_box_reg: 0.1293 (0.1388) time: 1.9221 data: 0.0060 max mem: 5348
Epoch: [19] [90/235] eta: 0:04:44 lr: 0.000000 loss: 0.2807
(0.3221) loss_classifier: 0.0311 (0.0494) loss_box_reg: 0.0507
(0.0720) loss_objectness: 0.0425 (0.0634) loss_rpn_box_reg: 0.1145 (0.1373) time: 1.9240 data: 0.0060 max mem: 5348
Epoch: [19] [100/235] eta: 0:04:25 lr: 0.000000 loss: 0.3179
(0.3227) loss_classifier: 0.0392 (0.0496) loss_box_reg: 0.0526
(0.0722) loss_objectness: 0.0487 (0.0629) loss_rpn_box_reg: 0.1129 (0.1380) time: 1.9314 data: 0.0063 max mem: 5348
Epoch: [19] [110/235] eta: 0:04:05 lr: 0.000000 loss: 0.3505
(0.3258) loss_classifier: 0.0529 (0.0500) loss_box_reg: 0.0822
(0.0733) loss_objectness: 0.0485 (0.0628) loss_rpn_box_reg: 0.1218 (0.1396) time: 1.9497 data: 0.0063 max mem: 5348
Epoch: [19] [120/235] eta: 0:03:44 lr: 0.000000 loss: 0.3753
(0.3312) loss_classifier: 0.0567 (0.0511) loss_box_reg: 0.0989
(0.0758) loss_objectness: 0.0504 (0.0642) loss_rpn_box_reg: 0.1294 (0.1401) time: 1.8601 data: 0.0061 max mem: 5348
Epoch: [19] [130/235] eta: 0:03:25 lr: 0.000000 loss: 0.3797
(0.3346) loss_classifier: 0.0518 (0.0515) loss_box_reg: 0.0958
(0.0762) loss_objectness: 0.0578 (0.0639) loss_rpn_box_reg: 0.1531 (0.1430) time: 1.9159 data: 0.0061 max mem: 5348
Epoch: [19] [140/235] eta: 0:03:05 lr: 0.000000 loss: 0.2928


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(0.3294) loss_classifier: 0.0372 (0.0506) loss_box_reg: 0.0447
(0.0746) loss_objectness: 0.0371 (0.0623) loss_rpn_box_reg: 0.11
27 (0.1419) time: 1.9578 data: 0.0060 max mem: 5348
Epoch: [19] [150/235] eta: 0:02:45 lr: 0.000000 loss: 0.2815
(0.3261) loss_classifier: 0.0317 (0.0497) loss_box_reg: 0.0343
(0.0730) loss_objectness: 0.0365 (0.0616) loss_rpn_box_reg: 0.11
27 (0.1419) time: 1.8807 data: 0.0060 max mem: 5348
Epoch: [19] [160/235] eta: 0:02:25 lr: 0.000000 loss: 0.2953
(0.3258) loss_classifier: 0.0398 (0.0496) loss_box_reg: 0.0422
(0.0717) loss_objectness: 0.0459 (0.0624) loss_rpn_box_reg: 0.14
83 (0.1421) time: 1.8471 data: 0.0060 max mem: 5348
Epoch: [19] [170/235] eta: 0:02:05 lr: 0.000000 loss: 0.2821
(0.3230) loss_classifier: 0.0398 (0.0489) loss_box_reg: 0.0436
(0.0706) loss_objectness: 0.0409 (0.0613) loss_rpn_box_reg: 0.13
55 (0.1422) time: 1.8648 data: 0.0061 max mem: 5348
Epoch: [19] [180/235] eta: 0:01:46 lr: 0.000000 loss: 0.2515
(0.3189) loss_classifier: 0.0265 (0.0479) loss_box_reg: 0.0391
(0.0695) loss_objectness: 0.0385 (0.0605) loss_rpn_box_reg: 0.12
22 (0.1410) time: 1.8721 data: 0.0061 max mem: 5348
Epoch: [19] [190/235] eta: 0:01:27 lr: 0.000000 loss: 0.2826
(0.3189) loss_classifier: 0.0272 (0.0475) loss_box_reg: 0.0450
(0.0689) loss_objectness: 0.0435 (0.0600) loss_rpn_box_reg: 0.12
22 (0.1425) time: 2.0862 data: 0.0061 max mem: 5348
Epoch: [19] [200/235] eta: 0:01:08 lr: 0.000000 loss: 0.3362
(0.3208) loss_classifier: 0.0451 (0.0483) loss_box_reg: 0.0541
(0.0704) loss_objectness: 0.0462 (0.0602) loss_rpn_box_reg: 0.15
79 (0.1419) time: 2.0748 data: 0.0061 max mem: 5348
Epoch: [19] [210/235] eta: 0:00:48 lr: 0.000000 loss: 0.3292
(0.3189) loss_classifier: 0.0332 (0.0475) loss_box_reg: 0.0408
(0.0691) loss_objectness: 0.0700 (0.0604) loss_rpn_box_reg: 0.12
96 (0.1420) time: 1.8259 data: 0.0060 max mem: 5348
Epoch: [19] [220/235] eta: 0:00:29 lr: 0.000000 loss: 0.3064
(0.3183) loss_classifier: 0.0275 (0.0471) loss_box_reg: 0.0447
(0.0690) loss_objectness: 0.0578 (0.0604) loss_rpn_box_reg: 0.12
96 (0.1418) time: 1.8928 data: 0.0060 max mem: 5348
Epoch: [19] [230/235] eta: 0:00:09 lr: 0.000000 loss: 0.3280
(0.3201) loss_classifier: 0.0413 (0.0476) loss_box_reg: 0.0592
(0.0697) loss_objectness: 0.0513 (0.0602) loss_rpn_box_reg: 0.14
20 (0.1427) time: 2.0342 data: 0.0067 max mem: 5348
Epoch: [19] [234/235] eta: 0:00:01 lr: 0.000000 loss: 0.3047
(0.3193) loss_classifier: 0.0452 (0.0475) loss_box_reg: 0.0535
(0.0696) loss_objectness: 0.0490 (0.0600) loss_rpn_box_reg: 0.12
80 (0.1422) time: 2.0058 data: 0.0066 max mem: 5348
Epoch: [19] Total time: 0:07:36 (1.9443 s / it)
creating index...
index created!
Test: [ 0/26] eta: 0:00:34 model_time: 1.0701 (1.0701) evaluator_time: 0.0033 (0.0033) time: 1.3281 data: 0.2521 max mem: 5348
Test: [25/26] eta: 0:00:00 model_time: 0.7567 (0.7755) evaluator_time: 0.0020 (0.0026) time: 0.7662 data: 0.0050 max mem: 5348
Test: Total time: 0:00:20 (0.7966 s / it)
Averaged stats: model_time: 0.7567 (0.7755) evaluator_time: 0.0020 (0.0026)
Accumulating evaluation results...
DONE (t=0.03s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.496
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.762
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.937

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00 ] = 0.523
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.437
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.550
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.361
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.569
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.569
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.512
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.620
creating index...
index created!
Test: [ 0/235] eta: 0:05:23 model_time: 1.0421 (1.0421) evalua
tor_time: 0.0039 (0.0039) time: 1.3766 data: 0.3279 max mem: 534
8
Test: [100/235] eta: 0:01:54 model_time: 0.8039 (0.8325) evalua
tor_time: 0.0024 (0.0031) time: 0.8695 data: 0.0060 max mem: 534
8
Test: [200/235] eta: 0:00:29 model_time: 0.7542 (0.8280) evalua
tor_time: 0.0024 (0.0031) time: 0.7814 data: 0.0057 max mem: 534
8
Test: [234/235] eta: 0:00:00 model_time: 0.8065 (0.8235) evalua
tor_time: 0.0022 (0.0031) time: 0.8166 data: 0.0057 max mem: 534
8
Test: Total time: 0:03:16 (0.8355 s / it)
Averaged stats: model_time: 0.8065 (0.8235) evaluator_time: 0.0022
(0.0031)
Accumulating evaluation results...
DONE (t=0.09s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.263
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.503
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.264
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.199
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.290
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.222
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.419
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.432
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = 0.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.313

```

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.470
That's it!
Starting the daemon thread to refresh tokens in background for process with pid = 63125

[2021-01-04T22:47:41.997934] The experiment completed successfully.
Finalizing run...
[2021-01-04T22:47:41.997954] Start FinalizingInRunHistory
[2021-01-04T22:47:41.998523] Logging experiment finalizing status in history service.
Cleaning up all outstanding Run operations, waiting 300.0 seconds
2 items cleaning up...
Cleanup took 0.15098786354064941 seconds
[2021-01-04T22:47:45.478055] Finished context manager injector.

Execution Summary

=====

RunId: torchvision_1609786836_0865d408
Web View: https://ml.azure.com/experiments/torchvision/runs/torchvision_1609786836_0865d408?wsid=/subscriptions/1db0a5ce-7de1-4082-8e25-3c5a4e5a9a98/resourcegroups/ProjektAzure/workspaces/ProjektAzure

WARNING - 'use_docker' parameter will be deprecated. Please use 'environment_definition' instead.
WARNING - If 'script' has been provided here and a script file name has been specified in 'run_config', 'script' provided in ScriptRunConfig initialization will take precedence.
WARNING - If 'arguments' has been provided here and arguments have been specified in 'run_config', 'arguments' provided in ScriptRunConfig initialization will take precedence.

RunId: torchvision_1609800475_f35fb8e1

Web View: https://ml.azure.com/experiments/torchvision/runs/torchvision_1609800475_f35fb8e1?wsid=/subscriptions/1db0a5ce-7de1-4082-8e25-3c5a4e5a9a98/resourcegroups/ProjektAzure/workspaces/ProjektAzure

Streaming azureml-logs/70_driver_log.txt

=====

[2021-01-04T22:48:02.109327] Entering context manager injector.
[context_manager_injector.py] Command line Options: Namespace(inject=['ProjectPythonPath:context_managers.ProjectPythonPath', 'RunHistory:context_managers.RunHistory', 'TrackUserError:context_managers.TrackUserError'], invocation=['train.py', '--data_path', '.', '--workers', '8', '--learning_rate', '0.005', '--epochs', '20', '--anchor_sizes', '16,32,64,128,256,512', '--anchor_aspect_ratios', '0.25,0.5,1.0,2.0', '--rpn_nms_thresh', '0.5', '--box_nms_thresh', '0.3', '--box_score_thresh', '0.1', '--num_classes', '7', '--dataset', 'PlayCards'])

Script type = None

Starting the daemon thread to refresh tokens in background for process with pid = 123970

Entering Run History Context Manager.

[2021-01-04T22:48:05.314455] Current directory: /tmp/azureml_runs/torchvision_1609800475_f35fb8e1

[2021-01-04T22:48:05.314488] Preparing to call script [train.py] with arguments: ['--data_path', '.', '--workers', '8', '--learning_rate', '0.005', '--epochs', '20', '--anchor_sizes', '16,32,64,128,256,512', '--anchor_aspect_ratios', '0.25,0.5,1.0,2.0', '--rpn_nms_thresh', '0.5', '--box_nms_thresh', '0.3', '--box_score_thresh', '0.1', '--num_classes', '7', '--dataset', 'PlayCards']

[2021-01-04T22:48:05.314506] After variable expansion, calling script [train.py] with arguments: ['--data_path', '.', '--workers', '8', '--learning_rate', '0.005', '--epochs', '20', '--anchor_sizes', '16,32,64,128,256,512', '--anchor_aspect_ratios', '0.25,0.5,1.0,2.0', '--rpn_nms_thresh', '0.5', '--box_nms_thresh', '0.3', '--box_score_thresh', '0.1', '--num_classes', '7', '--dataset', 'PlayCards']

Data/PlayCards/JPEGImages

Data/PlayCards/JPEGImages

<class 'str'>

Epoch: [0] [0/148] eta: 0:07:37 lr: 0.000039 loss: 3.2340 (3.2340) loss_classifier: 2.2274 (2.2274) loss_box_reg: 0.0279 (0.0279) loss_objectness: 0.7013 (0.7013) loss_rpn_box_reg: 0.2775 (0.2775) time: 3.0892 data: 0.3119 max mem: 3444

Epoch: [0] [10/148] eta: 0:04:01 lr: 0.000379 loss: 2.1095 (2.1526) loss_classifier: 1.2039 (1.2121) loss_box_reg: 0.0442 (0.0412) loss_objectness: 0.7044 (0.7030) loss_rpn_box_reg: 0.1845 (0.1963) time: 1.7477 data: 0.0360 max mem: 3444

Epoch: [0] [20/148] eta: 0:03:46 lr: 0.000719 loss: 1.1125 (1.6120) loss_classifier: 0.1293 (0.6748) loss_box_reg: 0.0442 (0.0471) loss_objectness: 0.6935 (0.6957) loss_rpn_box_reg: 0.1898 (0.1944) time: 1.7075 data: 0.0062 max mem: 3761

Epoch: [0] [30/148] eta: 0:03:45 lr: 0.001058 loss: 1.0209 (1.4263) loss_classifier: 0.1226 (0.5038) loss_box_reg: 0.0723 (0.0597) loss_objectness: 0.6703 (0.6801) loss_rpn_box_reg: 0.1898 (0.1827) time: 1.9957 data: 0.0050 max mem: 3761

Epoch: [0] [40/148] eta: 0:03:28 lr: 0.001398 loss: 0.9871 (1.3021) loss_classifier: 0.1142 (0.4032) loss_box_reg: 0.0828 (0.0683) loss_objectness: 0.6162 (0.6590) loss_rpn_box_reg: 0.1355 (0.1716) time: 2.0976 data: 0.0059 max mem: 3761

Epoch: [0] [50/148] eta: 0:03:07 lr: 0.001738 loss: 0.9165 (1.

2236) loss_classifier: 0.0769 (0.3399) loss_box_reg: 0.0916 (0.0735) loss_objectness: 0.5718 (0.6357) loss_rpn_box_reg: 0.1533 (0.1745) time: 1.9108 data: 0.0058 max mem: 3761
 Epoch: [0] [60/148] eta: 0:02:45 lr: 0.002078 loss: 0.8775 (1.1642) loss_classifier: 0.0706 (0.2993) loss_box_reg: 0.0820 (0.0805) loss_objectness: 0.5151 (0.6113) loss_rpn_box_reg: 0.1654 (0.1731) time: 1.7888 data: 0.0058 max mem: 3761
 Epoch: [0] [70/148] eta: 0:02:29 lr: 0.002418 loss: 0.8581 (1.1262) loss_classifier: 0.0952 (0.2713) loss_box_reg: 0.0923 (0.0863) loss_objectness: 0.4548 (0.5893) loss_rpn_box_reg: 0.1863 (0.1792) time: 1.9350 data: 0.0060 max mem: 3761
 Epoch: [0] [80/148] eta: 0:02:09 lr: 0.002757 loss: 0.8581 (1.0902) loss_classifier: 0.0952 (0.2475) loss_box_reg: 0.0923 (0.0866) loss_objectness: 0.4689 (0.5746) loss_rpn_box_reg: 0.2047 (0.1815) time: 1.9657 data: 0.0060 max mem: 3761
 Epoch: [0] [90/148] eta: 0:01:51 lr: 0.003097 loss: 0.8001 (1.0633) loss_classifier: 0.0828 (0.2321) loss_box_reg: 0.0881 (0.0916) loss_objectness: 0.4535 (0.5569) loss_rpn_box_reg: 0.1990 (0.1827) time: 1.9141 data: 0.0060 max mem: 3761
 Epoch: [0] [100/148] eta: 0:01:31 lr: 0.003437 loss: 0.7790 (1.0351) loss_classifier: 0.1112 (0.2225) loss_box_reg: 0.1284 (0.0993) loss_objectness: 0.3360 (0.5296) loss_rpn_box_reg: 0.1995 (0.1837) time: 1.9141 data: 0.0059 max mem: 3761
 Epoch: [0] [110/148] eta: 0:01:12 lr: 0.003777 loss: 0.6972 (0.9960) loss_classifier: 0.1216 (0.2157) loss_box_reg: 0.1547 (0.1034) loss_objectness: 0.2042 (0.4975) loss_rpn_box_reg: 0.1446 (0.1794) time: 1.8717 data: 0.0060 max mem: 3761
 Epoch: [0] [120/148] eta: 0:00:53 lr: 0.004117 loss: 0.6177 (0.9594) loss_classifier: 0.1257 (0.2088) loss_box_reg: 0.1387 (0.1062) loss_objectness: 0.1304 (0.4644) loss_rpn_box_reg: 0.1426 (0.1800) time: 1.8791 data: 0.0063 max mem: 3761
 Epoch: [0] [130/148] eta: 0:00:34 lr: 0.004456 loss: 0.5181 (0.9261) loss_classifier: 0.1146 (0.2016) loss_box_reg: 0.0944 (0.1053) loss_objectness: 0.1141 (0.4402) loss_rpn_box_reg: 0.1653 (0.1790) time: 1.8258 data: 0.0064 max mem: 3761
 Epoch: [0] [140/148] eta: 0:00:15 lr: 0.004796 loss: 0.4953 (0.8921) loss_classifier: 0.0958 (0.1940) loss_box_reg: 0.0621 (0.1023) loss_objectness: 0.1189 (0.4169) loss_rpn_box_reg: 0.1490 (0.1790) time: 1.8188 data: 0.0063 max mem: 3761
 Epoch: [0] [147/148] eta: 0:00:01 lr: 0.005000 loss: 0.5023 (0.8766) loss_classifier: 0.0973 (0.1905) loss_box_reg: 0.0645 (0.1016) loss_objectness: 0.1125 (0.4040) loss_rpn_box_reg: 0.1560 (0.1805) time: 1.7730 data: 0.0060 max mem: 3761
 Epoch: [0] Total time: 0:04:38 (1.8847 s / it)

creating index...
 index created!

<string>:6: DeprecationWarning: object of type <class 'numpy.float64'> cannot be safely interpreted as an integer.

Test: [0/34] eta: 0:00:31 model_time: 0.7044 (0.7044) evaluator_time: 0.0044 (0.0044) time: 0.9342 data: 0.2230 max mem: 3761
 Test: [33/34] eta: 0:00:00 model_time: 0.6853 (0.6894) evaluator_time: 0.0045 (0.0042) time: 0.7027 data: 0.0053 max mem: 3761
 Test: Total time: 0:00:24 (0.7084 s / it)

Averaged stats: model_time: 0.6853 (0.6894) evaluator_time: 0.0045 (0.0042)

Accumulating evaluation results...

DONE (t=0.07s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.207

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=1

```

00 ] = 0.356
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.224
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.141
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.232
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.340
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.565
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.565
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.293
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.592
creating index...
index created!
Test: [ 0/148] eta: 0:02:27 model_time: 0.7399 (0.7399) evalua
tor_time: 0.0052 (0.0052) time: 0.9991 data: 0.2517 max mem: 376
1
Test: [100/148] eta: 0:00:38 model_time: 0.6885 (0.7867) evalua
tor_time: 0.0045 (0.0063) time: 0.7770 data: 0.0059 max mem: 376
1
Test: [147/148] eta: 0:00:00 model_time: 0.6923 (0.7831) evalua
tor_time: 0.0038 (0.0056) time: 0.8158 data: 0.0058 max mem: 376
1
Test: Total time: 0:01:58 (0.7984 s / it)
Averaged stats: model_time: 0.6923 (0.7831) evaluator_time: 0.0038
(0.0056)
Accumulating evaluation results...
DONE (t=0.14s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.101
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.191
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.105
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.033
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.104
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.291
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.400
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.400
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.097
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1

```

```
00 ] = 0.415
Epoch: [1] [ 0/148] eta: 0:06:57 lr: 0.005000 loss: 0.3713 (0.3713) loss_classifier: 0.1229 (0.1229) loss_box_reg: 0.0916 (0.0916) loss_objectness: 0.0661 (0.0661) loss_rpn_box_reg: 0.0907 (0.0907) time: 2.8192 data: 0.2302 max mem: 3761
Epoch: [1] [ 10/148] eta: 0:04:24 lr: 0.005000 loss: 0.4119 (0.4787) loss_classifier: 0.1060 (0.1038) loss_box_reg: 0.0748 (0.0794) loss_objectness: 0.1044 (0.1044) loss_rpn_box_reg: 0.1967 (0.1911) time: 1.9140 data: 0.0275 max mem: 3761
Epoch: [1] [ 20/148] eta: 0:03:48 lr: 0.005000 loss: 0.4569 (0.4802) loss_classifier: 0.1060 (0.1090) loss_box_reg: 0.0668 (0.0844) loss_objectness: 0.1044 (0.1034) loss_rpn_box_reg: 0.2065 (0.1834) time: 1.7368 data: 0.0060 max mem: 3761
Epoch: [1] [ 30/148] eta: 0:03:32 lr: 0.005000 loss: 0.4294 (0.5121) loss_classifier: 0.0937 (0.1048) loss_box_reg: 0.0783 (0.0821) loss_objectness: 0.1054 (0.1289) loss_rpn_box_reg: 0.1418 (0.1963) time: 1.7375 data: 0.0058 max mem: 3761
Epoch: [1] [ 40/148] eta: 0:03:17 lr: 0.005000 loss: 0.5370 (0.5394) loss_classifier: 0.1042 (0.1094) loss_box_reg: 0.0783 (0.0850) loss_objectness: 0.1628 (0.1571) loss_rpn_box_reg: 0.1550 (0.1878) time: 1.8738 data: 0.0065 max mem: 3761
Epoch: [1] [ 50/148] eta: 0:03:01 lr: 0.005000 loss: 0.6689 (0.6066) loss_classifier: 0.1178 (0.1171) loss_box_reg: 0.0776 (0.0862) loss_objectness: 0.2619 (0.1870) loss_rpn_box_reg: 0.1782 (0.2162) time: 1.9199 data: 0.0061 max mem: 3761
Epoch: [1] [ 60/148] eta: 0:02:44 lr: 0.005000 loss: 0.8697 (0.6489) loss_classifier: 0.1268 (0.1214) loss_box_reg: 0.0757 (0.0870) loss_objectness: 0.4050 (0.2301) loss_rpn_box_reg: 0.1692 (0.2103) time: 1.9603 data: 0.0061 max mem: 3761
Epoch: [1] [ 70/148] eta: 0:02:27 lr: 0.005000 loss: 0.8045 (0.6692) loss_classifier: 0.1218 (0.1219) loss_box_reg: 0.0862 (0.0867) loss_objectness: 0.4026 (0.2545) loss_rpn_box_reg: 0.1577 (0.2060) time: 2.0052 data: 0.0061 max mem: 3761
Epoch: [1] [ 80/148] eta: 0:02:07 lr: 0.005000 loss: 0.8042 (0.6884) loss_classifier: 0.1524 (0.1291) loss_box_reg: 0.0896 (0.0902) loss_objectness: 0.3586 (0.2611) loss_rpn_box_reg: 0.1797 (0.2080) time: 1.8643 data: 0.0063 max mem: 3761
Epoch: [1] [ 90/148] eta: 0:01:48 lr: 0.005000 loss: 0.7712 (0.6862) loss_classifier: 0.1368 (0.1281) loss_box_reg: 0.0735 (0.0878) loss_objectness: 0.2359 (0.2581) loss_rpn_box_reg: 0.2044 (0.2121) time: 1.7708 data: 0.0063 max mem: 3761
Epoch: [1] [100/148] eta: 0:01:30 lr: 0.005000 loss: 0.6585 (0.6877) loss_classifier: 0.1170 (0.1304) loss_box_reg: 0.0663 (0.0879) loss_objectness: 0.2222 (0.2573) loss_rpn_box_reg: 0.2078 (0.2121) time: 1.9222 data: 0.0061 max mem: 3761
Epoch: [1] [110/148] eta: 0:01:11 lr: 0.005000 loss: 0.5379 (0.6770) loss_classifier: 0.1149 (0.1299) loss_box_reg: 0.0635 (0.0863) loss_objectness: 0.2025 (0.2518) loss_rpn_box_reg: 0.1597 (0.2090) time: 1.9235 data: 0.0061 max mem: 3761
Epoch: [1] [120/148] eta: 0:00:52 lr: 0.005000 loss: 0.5286 (0.6661) loss_classifier: 0.1099 (0.1293) loss_box_reg: 0.0654 (0.0849) loss_objectness: 0.1745 (0.2432) loss_rpn_box_reg: 0.1828 (0.2087) time: 1.8334 data: 0.0062 max mem: 3761
Epoch: [1] [130/148] eta: 0:00:33 lr: 0.005000 loss: 0.5295 (0.6539) loss_classifier: 0.1093 (0.1279) loss_box_reg: 0.0530 (0.0824) loss_objectness: 0.1120 (0.2337) loss_rpn_box_reg: 0.1918 (0.2100) time: 1.8795 data: 0.0062 max mem: 3761
Epoch: [1] [140/148] eta: 0:00:15 lr: 0.005000 loss: 0.5764 (0.6503) loss_classifier: 0.1068 (0.1292) loss_box_reg: 0.0530 (0.0828) loss_objectness: 0.1185 (0.2277) loss_rpn_box_reg: 0.2013 (0.2107) time: 1.9148 data: 0.0066 max mem: 3761
```

```
Epoch: [1] [147/148] eta: 0:00:01 lr: 0.005000 loss: 0.5499 (0.6375) loss_classifier: 0.1068 (0.1273) loss_box_reg: 0.0502 (0.0810) loss_objectness: 0.1009 (0.2205) loss_rpn_box_reg: 0.2066 (0.2086) time: 1.9626 data: 0.0066 max mem: 3761
Epoch: [1] Total time: 0:04:39 (1.8869 s / it)
creating index...
index created!
Test: [ 0/34] eta: 0:00:32 model_time: 0.7118 (0.7118) evaluator_time: 0.0045 (0.0045) time: 0.9555 data: 0.2370 max mem: 3761
Test: [33/34] eta: 0:00:00 model_time: 0.6952 (0.6957) evaluator_time: 0.0041 (0.0041) time: 0.7099 data: 0.0059 max mem: 3761
Test: Total time: 0:00:24 (0.7157 s / it)
Averaged stats: model_time: 0.6952 (0.6957) evaluator_time: 0.0041 (0.0041)
Accumulating evaluation results...
DONE (t=0.06s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.208
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.342
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.242
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.275
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.218
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.309
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.508
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.508
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.410
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.523
creating index...
index created!
Test: [ 0/148] eta: 0:03:45 model_time: 1.1615 (1.1615) evaluator_time: 0.0049 (0.0049) time: 1.5203 data: 0.3512 max mem: 3761
Test: [100/148] eta: 0:00:39 model_time: 0.6911 (0.8025) evaluator_time: 0.0036 (0.0037) time: 0.7997 data: 0.0061 max mem: 3761
Test: [147/148] eta: 0:00:00 model_time: 0.6964 (0.7824) evaluator_time: 0.0035 (0.0037) time: 0.7319 data: 0.0061 max mem: 3761
Test: Total time: 0:01:57 (0.7967 s / it)
Averaged stats: model_time: 0.6964 (0.7824) evaluator_time: 0.0035 (0.0037)
Accumulating evaluation results...
DONE (t=0.13s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.088
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.088
```



```
00 ] = 0.173
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.087
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.143
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.090
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.258
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.327
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.327
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.321
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.327
Epoch: [2] [ 0/148] eta: 0:04:37 lr: 0.005000 loss: 0.4066 (0.
4066) loss_classifier: 0.0518 (0.0518) loss_box_reg: 0.0332 (0.03
32) loss_objectness: 0.0937 (0.0937) loss_rpn_box_reg: 0.2278 (0.
2278) time: 1.8779 data: 0.2464 max mem: 3761
Epoch: [2] [ 10/148] eta: 0:04:11 lr: 0.005000 loss: 0.4194 (0.
4144) loss_classifier: 0.0758 (0.0880) loss_box_reg: 0.0332 (0.04
45) loss_objectness: 0.0937 (0.0989) loss_rpn_box_reg: 0.1837 (0.
1830) time: 1.8256 data: 0.0306 max mem: 3761
Epoch: [2] [ 20/148] eta: 0:03:59 lr: 0.005000 loss: 0.4401 (0.
4562) loss_classifier: 0.1016 (0.1109) loss_box_reg: 0.0566 (0.06
15) loss_objectness: 0.0903 (0.1128) loss_rpn_box_reg: 0.1711 (0.
1710) time: 1.8674 data: 0.0060 max mem: 3761
Epoch: [2] [ 30/148] eta: 0:03:38 lr: 0.005000 loss: 0.4653 (0.
4401) loss_classifier: 0.1090 (0.1066) loss_box_reg: 0.0654 (0.06
17) loss_objectness: 0.0903 (0.1072) loss_rpn_box_reg: 0.1513 (0.
1646) time: 1.8652 data: 0.0046 max mem: 3761
Epoch: [2] [ 40/148] eta: 0:03:16 lr: 0.005000 loss: 0.3624 (0.
4225) loss_classifier: 0.0814 (0.1017) loss_box_reg: 0.0489 (0.05
93) loss_objectness: 0.0818 (0.1095) loss_rpn_box_reg: 0.1112 (0.
1520) time: 1.7663 data: 0.0062 max mem: 3761
Epoch: [2] [ 50/148] eta: 0:02:57 lr: 0.005000 loss: 0.3981 (0.
4187) loss_classifier: 0.0906 (0.1043) loss_box_reg: 0.0636 (0.06
07) loss_objectness: 0.0629 (0.0991) loss_rpn_box_reg: 0.1315 (0.
1546) time: 1.7384 data: 0.0063 max mem: 3761
Epoch: [2] [ 60/148] eta: 0:02:41 lr: 0.005000 loss: 0.3983 (0.
4067) loss_classifier: 0.0914 (0.1020) loss_box_reg: 0.0392 (0.05
69) loss_objectness: 0.0591 (0.0943) loss_rpn_box_reg: 0.1439 (0.
1534) time: 1.8829 data: 0.0062 max mem: 3761
Epoch: [2] [ 70/148] eta: 0:02:24 lr: 0.005000 loss: 0.3895 (0.
4095) loss_classifier: 0.0914 (0.1050) loss_box_reg: 0.0372 (0.05
97) loss_objectness: 0.0648 (0.0923) loss_rpn_box_reg: 0.1173 (0.
1525) time: 1.9812 data: 0.0062 max mem: 3761
Epoch: [2] [ 80/148] eta: 0:02:06 lr: 0.005000 loss: 0.3680 (0.
4039) loss_classifier: 0.1111 (0.1051) loss_box_reg: 0.0606 (0.06
00) loss_objectness: 0.0628 (0.0886) loss_rpn_box_reg: 0.1430 (0.
1502) time: 1.9378 data: 0.0063 max mem: 3761
Epoch: [2] [ 90/148] eta: 0:01:49 lr: 0.005000 loss: 0.3243 (0.
4006) loss_classifier: 0.0803 (0.1033) loss_box_reg: 0.0422 (0.05
85) loss_objectness: 0.0536 (0.0844) loss_rpn_box_reg: 0.1504 (0.
1543) time: 1.9660 data: 0.0063 max mem: 3761
```

```

Epoch: [2] [100/148] eta: 0:01:29 lr: 0.005000 loss: 0.3243 (0.3962) loss_classifier: 0.0693 (0.1019) loss_box_reg: 0.0331 (0.0573) loss_objectness: 0.0534 (0.0843) loss_rpn_box_reg: 0.1434 (0.1526) time: 1.8683 data: 0.0065 max mem: 3761
Epoch: [2] [110/148] eta: 0:01:10 lr: 0.005000 loss: 0.2944 (0.3898) loss_classifier: 0.0693 (0.1005) loss_box_reg: 0.0408 (0.0560) loss_objectness: 0.0534 (0.0830) loss_rpn_box_reg: 0.1210 (0.1504) time: 1.8144 data: 0.0065 max mem: 3761
Epoch: [2] [120/148] eta: 0:00:52 lr: 0.005000 loss: 0.3066 (0.3849) loss_classifier: 0.0705 (0.0982) loss_box_reg: 0.0385 (0.0549) loss_objectness: 0.0440 (0.0810) loss_rpn_box_reg: 0.1221 (0.1508) time: 1.8609 data: 0.0065 max mem: 3761
Epoch: [2] [130/148] eta: 0:00:33 lr: 0.005000 loss: 0.3290 (0.3819) loss_classifier: 0.0732 (0.0974) loss_box_reg: 0.0378 (0.0541) loss_objectness: 0.0724 (0.0818) loss_rpn_box_reg: 0.1208 (0.1486) time: 1.7688 data: 0.0066 max mem: 3761
Epoch: [2] [140/148] eta: 0:00:14 lr: 0.005000 loss: 0.3554 (0.3780) loss_classifier: 0.0732 (0.0961) loss_box_reg: 0.0411 (0.0533) loss_objectness: 0.0713 (0.0814) loss_rpn_box_reg: 0.1185 (0.1472) time: 1.8179 data: 0.0065 max mem: 3761
Epoch: [2] [147/148] eta: 0:00:01 lr: 0.005000 loss: 0.3554 (0.3767) loss_classifier: 0.0854 (0.0960) loss_box_reg: 0.0474 (0.0535) loss_objectness: 0.0657 (0.0807) loss_rpn_box_reg: 0.1198 (0.1466) time: 1.8771 data: 0.0065 max mem: 3761
Epoch: [2] Total time: 0:04:35 (1.8615 s / it)
creating index...
index created!
Test: [ 0/34] eta: 0:00:32 model_time: 0.6975 (0.6975) evaluator_time: 0.0039 (0.0039) time: 0.9675 data: 0.2637 max mem: 3761
Test: [33/34] eta: 0:00:00 model_time: 0.6928 (0.6960) evaluator_time: 0.0041 (0.0037) time: 0.7072 data: 0.0058 max mem: 3761
Test: Total time: 0:00:24 (0.7160 s / it)
Averaged stats: model_time: 0.6928 (0.6960) evaluator_time: 0.0041 (0.0037)
Accumulating evaluation results...
DONE (t=0.05s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.365
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.501
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.453
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.416
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.378
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.489
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.774
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.774
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.703
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.782

```

creating index...

index created!

Test: [0/148] eta: 0:02:30 model_time: 0.7594 (0.7594) evaluator_time: 0.0051 (0.0051) time: 1.0174 data: 0.2504 max mem: 3761

Test: [100/148] eta: 0:00:37 model_time: 0.6965 (0.7735) evaluator_time: 0.0030 (0.0036) time: 0.8036 data: 0.0060 max mem: 3761

Test: [147/148] eta: 0:00:00 model_time: 0.6964 (0.7948) evaluator_time: 0.0036 (0.0035) time: 0.8492 data: 0.0161 max mem: 3761

Test: Total time: 0:01:59 (0.8097 s / it)

Averaged stats: model_time: 0.6964 (0.7948) evaluator_time: 0.0036 (0.0035)

Accumulating evaluation results...

DONE (t=0.12s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.144

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.225

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.162

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.090

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.149

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.367

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.463

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.463

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.267

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.473

Epoch: [3] [0/148] eta: 0:04:42 lr: 0.000500 loss: 0.4036 (0.4036) loss_classifier: 0.0544 (0.0544) loss_box_reg: 0.0373 (0.0373) loss_objectness: 0.1614 (0.1614) loss_rpn_box_reg: 0.1505 (0.1505) time: 1.9057 data: 0.2805 max mem: 3761

Epoch: [3] [10/148] eta: 0:04:46 lr: 0.000500 loss: 0.2771 (0.2819) loss_classifier: 0.0681 (0.0666) loss_box_reg: 0.0407 (0.0376) loss_objectness: 0.0575 (0.0740) loss_rpn_box_reg: 0.0995 (0.1038) time: 2.0776 data: 0.0322 max mem: 3761

Epoch: [3] [20/148] eta: 0:04:21 lr: 0.000500 loss: 0.2331 (0.2677) loss_classifier: 0.0677 (0.0693) loss_box_reg: 0.0254 (0.0337) loss_objectness: 0.0505 (0.0642) loss_rpn_box_reg: 0.0936 (0.1005) time: 2.0471 data: 0.0058 max mem: 3761

Epoch: [3] [30/148] eta: 0:03:52 lr: 0.000500 loss: 0.2264 (0.2690) loss_classifier: 0.0677 (0.0713) loss_box_reg: 0.0254 (0.0340) loss_objectness: 0.0554 (0.0696) loss_rpn_box_reg: 0.0792 (0.0943) time: 1.9154 data: 0.0051 max mem: 3761

Epoch: [3] [40/148] eta: 0:03:33 lr: 0.000500 loss: 0.2508 (0.2562) loss_classifier: 0.0638 (0.0688) loss_box_reg: 0.0238 (0.0316) loss_objectness: 0.0504 (0.0645) loss_rpn_box_reg: 0.0645 (0.0912) time: 1.9181 data: 0.0061 max mem: 3761

```

Epoch: [3] [ 50/148] eta: 0:03:07 lr: 0.000500 loss: 0.2130 (0.2536) loss_classifier: 0.0581 (0.0689) loss_box_reg: 0.0205 (0.0318) loss_objectness: 0.0498 (0.0652) loss_rpn_box_reg: 0.0667 (0.0877) time: 1.8132 data: 0.0061 max mem: 3761
Epoch: [3] [ 60/148] eta: 0:02:48 lr: 0.000500 loss: 0.2130 (0.2497) loss_classifier: 0.0581 (0.0698) loss_box_reg: 0.0255 (0.0313) loss_objectness: 0.0498 (0.0636) loss_rpn_box_reg: 0.0667 (0.0850) time: 1.7656 data: 0.0061 max mem: 3761
Epoch: [3] [ 70/148] eta: 0:02:29 lr: 0.000500 loss: 0.2035 (0.2449) loss_classifier: 0.0587 (0.0689) loss_box_reg: 0.0237 (0.0308) loss_objectness: 0.0372 (0.0619) loss_rpn_box_reg: 0.0728 (0.0833) time: 1.9310 data: 0.0065 max mem: 3761
Epoch: [3] [ 80/148] eta: 0:02:09 lr: 0.000500 loss: 0.2152 (0.2433) loss_classifier: 0.0587 (0.0691) loss_box_reg: 0.0226 (0.0314) loss_objectness: 0.0390 (0.0604) loss_rpn_box_reg: 0.0684 (0.0824) time: 1.8836 data: 0.0064 max mem: 3761
Epoch: [3] [ 90/148] eta: 0:01:50 lr: 0.000500 loss: 0.2212 (0.2431) loss_classifier: 0.0748 (0.0699) loss_box_reg: 0.0244 (0.0315) loss_objectness: 0.0392 (0.0601) loss_rpn_box_reg: 0.0679 (0.0815) time: 1.8615 data: 0.0066 max mem: 3761
Epoch: [3] [100/148] eta: 0:01:30 lr: 0.000500 loss: 0.2119 (0.2418) loss_classifier: 0.0629 (0.0705) loss_box_reg: 0.0244 (0.0319) loss_objectness: 0.0359 (0.0588) loss_rpn_box_reg: 0.0631 (0.0806) time: 1.8615 data: 0.0066 max mem: 3761
Epoch: [3] [110/148] eta: 0:01:11 lr: 0.000500 loss: 0.2178 (0.2418) loss_classifier: 0.0717 (0.0717) loss_box_reg: 0.0276 (0.0324) loss_objectness: 0.0336 (0.0570) loss_rpn_box_reg: 0.0776 (0.0806) time: 1.7320 data: 0.0060 max mem: 3761
Epoch: [3] [120/148] eta: 0:00:51 lr: 0.000500 loss: 0.2178 (0.2391) loss_classifier: 0.0622 (0.0705) loss_box_reg: 0.0215 (0.0314) loss_objectness: 0.0348 (0.0571) loss_rpn_box_reg: 0.0686 (0.0800) time: 1.6453 data: 0.0061 max mem: 3761
Epoch: [3] [130/148] eta: 0:00:33 lr: 0.000500 loss: 0.1728 (0.2359) loss_classifier: 0.0537 (0.0706) loss_box_reg: 0.0188 (0.0311) loss_objectness: 0.0356 (0.0561) loss_rpn_box_reg: 0.0515 (0.0780) time: 1.7353 data: 0.0062 max mem: 3761
Epoch: [3] [140/148] eta: 0:00:14 lr: 0.000500 loss: 0.2124 (0.2338) loss_classifier: 0.0676 (0.0709) loss_box_reg: 0.0306 (0.0317) loss_objectness: 0.0281 (0.0546) loss_rpn_box_reg: 0.0515 (0.0766) time: 1.8208 data: 0.0061 max mem: 3761
Epoch: [3] [147/148] eta: 0:00:01 lr: 0.000500 loss: 0.2104 (0.2323) loss_classifier: 0.0676 (0.0712) loss_box_reg: 0.0306 (0.0315) loss_objectness: 0.0278 (0.0536) loss_rpn_box_reg: 0.0594 (0.0760) time: 1.7675 data: 0.0060 max mem: 3761
Epoch: [3] Total time: 0:04:33 (1.8456 s / it)
creating index...
index created!
Test: [ 0/34] eta: 0:00:32 model_time: 0.7132 (0.7132) evaluator_time: 0.0040 (0.0040) time: 0.9488 data: 0.2292 max mem: 3761
Test: [33/34] eta: 0:00:00 model_time: 0.6943 (0.6980) evaluator_time: 0.0039 (0.0037) time: 0.7099 data: 0.0050 max mem: 3761
Test: Total time: 0:00:24 (0.7172 s / it)
Averaged stats: model_time: 0.6943 (0.6980) evaluator_time: 0.0039 (0.0037)
Accumulating evaluation results...
DONE (t=0.06s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.417
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.521

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```

Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.474
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.515
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.430
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.548
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.826
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.826
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.770
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.833
creating index...
index created!
Test: [ 0/148] eta: 0:03:25 model_time: 1.1527 (1.1527) evalua
tor_time: 0.0050 (0.0050) time: 1.3867 data: 0.2270 max mem: 376
1
Test: [100/148] eta: 0:00:39 model_time: 0.6958 (0.8065) evalua
tor_time: 0.0034 (0.0034) time: 0.8210 data: 0.0059 max mem: 376
1
Test: [147/148] eta: 0:00:00 model_time: 0.6960 (0.7901) evalua
tor_time: 0.0031 (0.0034) time: 0.7724 data: 0.0062 max mem: 376
1
Test: Total time: 0:01:58 (0.8033 s / it)
Averaged stats: model_time: 0.6960 (0.7901) evaluator_time: 0.0031
(0.0034)
Accumulating evaluation results...
DONE (t=0.13s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.172
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.253
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.173
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.070
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.178
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.401
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.495
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.495
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.181
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.510

```

Epoch: [4] [0/148] eta: 0:04:45 lr: 0.000500 loss: 0.2416 (0.2416) loss_classifier: 0.0713 (0.0713) loss_box_reg: 0.0291 (0.0291) loss_objectness: 0.0557 (0.0557) loss_rpn_box_reg: 0.0855 (0.0855) time: 1.9297 data: 0.3080 max mem: 3761

Epoch: [4] [10/148] eta: 0:04:02 lr: 0.000500 loss: 0.1884 (0.2273) loss_classifier: 0.0709 (0.0744) loss_box_reg: 0.0291 (0.0312) loss_objectness: 0.0444 (0.0548) loss_rpn_box_reg: 0.0602 (0.0670) time: 1.7578 data: 0.0337 max mem: 3761

Epoch: [4] [20/148] eta: 0:04:11 lr: 0.000500 loss: 0.1794 (0.2014) loss_classifier: 0.0626 (0.0704) loss_box_reg: 0.0265 (0.0278) loss_objectness: 0.0257 (0.0410) loss_rpn_box_reg: 0.0563 (0.0623) time: 1.9670 data: 0.0056 max mem: 3761

Epoch: [4] [30/148] eta: 0:03:46 lr: 0.000500 loss: 0.1696 (0.1952) loss_classifier: 0.0533 (0.0646) loss_box_reg: 0.0161 (0.0240) loss_objectness: 0.0257 (0.0393) loss_rpn_box_reg: 0.0595 (0.0672) time: 2.0019 data: 0.0059 max mem: 3761

Epoch: [4] [40/148] eta: 0:03:27 lr: 0.000500 loss: 0.1622 (0.1852) loss_classifier: 0.0509 (0.0631) loss_box_reg: 0.0161 (0.0242) loss_objectness: 0.0197 (0.0359) loss_rpn_box_reg: 0.0554 (0.0620) time: 1.8694 data: 0.0065 max mem: 3761

Epoch: [4] [50/148] eta: 0:03:09 lr: 0.000500 loss: 0.1546 (0.1810) loss_classifier: 0.0486 (0.0618) loss_box_reg: 0.0164 (0.0239) loss_objectness: 0.0165 (0.0367) loss_rpn_box_reg: 0.0403 (0.0587) time: 1.9656 data: 0.0061 max mem: 3761

Epoch: [4] [60/148] eta: 0:02:45 lr: 0.000500 loss: 0.1712 (0.1854) loss_classifier: 0.0462 (0.0610) loss_box_reg: 0.0184 (0.0241) loss_objectness: 0.0298 (0.0393) loss_rpn_box_reg: 0.0562 (0.0610) time: 1.8095 data: 0.0061 max mem: 3761

Epoch: [4] [70/148] eta: 0:02:26 lr: 0.000500 loss: 0.2010 (0.1871) loss_classifier: 0.0502 (0.0615) loss_box_reg: 0.0212 (0.0248) loss_objectness: 0.0372 (0.0394) loss_rpn_box_reg: 0.0626 (0.0614) time: 1.7172 data: 0.0065 max mem: 3761

Epoch: [4] [80/148] eta: 0:02:07 lr: 0.000500 loss: 0.1848 (0.1888) loss_classifier: 0.0564 (0.0617) loss_box_reg: 0.0229 (0.0257) loss_objectness: 0.0358 (0.0388) loss_rpn_box_reg: 0.0553 (0.0626) time: 1.8617 data: 0.0066 max mem: 3761

Epoch: [4] [90/148] eta: 0:01:49 lr: 0.000500 loss: 0.1850 (0.1911) loss_classifier: 0.0624 (0.0632) loss_box_reg: 0.0256 (0.0269) loss_objectness: 0.0319 (0.0381) loss_rpn_box_reg: 0.0577 (0.0629) time: 1.9094 data: 0.0062 max mem: 3761

Epoch: [4] [100/148] eta: 0:01:30 lr: 0.000500 loss: 0.1856 (0.1910) loss_classifier: 0.0667 (0.0641) loss_box_reg: 0.0295 (0.0277) loss_objectness: 0.0283 (0.0377) loss_rpn_box_reg: 0.0526 (0.0616) time: 1.8659 data: 0.0061 max mem: 3761

Epoch: [4] [110/148] eta: 0:01:11 lr: 0.000500 loss: 0.1794 (0.1908) loss_classifier: 0.0701 (0.0650) loss_box_reg: 0.0273 (0.0278) loss_objectness: 0.0251 (0.0372) loss_rpn_box_reg: 0.0399 (0.0609) time: 1.9150 data: 0.0060 max mem: 3761

Epoch: [4] [120/148] eta: 0:00:52 lr: 0.000500 loss: 0.1426 (0.1902) loss_classifier: 0.0701 (0.0650) loss_box_reg: 0.0252 (0.0282) loss_objectness: 0.0234 (0.0369) loss_rpn_box_reg: 0.0407 (0.0600) time: 1.9126 data: 0.0060 max mem: 3761

Epoch: [4] [130/148] eta: 0:00:34 lr: 0.000500 loss: 0.1345 (0.1916) loss_classifier: 0.0478 (0.0650) loss_box_reg: 0.0206 (0.0284) loss_objectness: 0.0168 (0.0385) loss_rpn_box_reg: 0.0452 (0.0597) time: 1.9572 data: 0.0062 max mem: 3761

Epoch: [4] [140/148] eta: 0:00:15 lr: 0.000500 loss: 0.2069 (0.1921) loss_classifier: 0.0687 (0.0658) loss_box_reg: 0.0282 (0.0285) loss_objectness: 0.0230 (0.0382) loss_rpn_box_reg: 0.0452 (0.0596) time: 2.0058 data: 0.0064 max mem: 3761

Epoch: [4] [147/148] eta: 0:00:01 lr: 0.000500 loss: 0.2069 (0.

1917) loss_classifier: 0.0612 (0.0652) loss_box_reg: 0.0282 (0.0284) loss_objectness: 0.0249 (0.0380) loss_rpn_box_reg: 0.0476 (0.0601) time: 1.9126 data: 0.0062 max mem: 3761

Epoch: [4] Total time: 0:04:40 (1.8932 s / it)

creating index...

index created!

Test: [0/34] eta: 0:00:32 model_time: 0.6972 (0.6972) evaluator_time: 0.0034 (0.0034) time: 0.9417 data: 0.2387 max mem: 3761

Test: [33/34] eta: 0:00:00 model_time: 0.6928 (0.6964) evaluator_time: 0.0037 (0.0036) time: 0.7092 data: 0.0058 max mem: 3761

Test: Total time: 0:00:24 (0.7156 s / it)

Averaged stats: model_time: 0.6928 (0.6964) evaluator_time: 0.0037 (0.0036)

Accumulating evaluation results...

DONE (t=0.05s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.425

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.533

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.482

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.610

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.433

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.567

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.833

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.833

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.810

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.837

creating index...

index created!

Test: [0/148] eta: 0:02:32 model_time: 0.7963 (0.7963) evaluator_time: 0.0068 (0.0068) time: 1.0320 data: 0.2261 max mem: 3761

Test: [100/148] eta: 0:00:38 model_time: 0.6994 (0.7832) evaluator_time: 0.0029 (0.0033) time: 0.8221 data: 0.0059 max mem: 3761

Test: [147/148] eta: 0:00:00 model_time: 0.7041 (0.7906) evaluator_time: 0.0030 (0.0032) time: 0.8334 data: 0.0059 max mem: 3761

Test: Total time: 0:01:58 (0.8033 s / it)

Averaged stats: model_time: 0.7041 (0.7906) evaluator_time: 0.0030 (0.0032)

Accumulating evaluation results...

DONE (t=0.11s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.147

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.212

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.155
Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000
Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.152
Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.150
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.369
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.463
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.463
Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000
Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.377
Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.468
Epoch: [5] [0/148] eta: 0:04:40 lr: 0.000500 loss: 0.1758 (0.1758) loss_classifier: 0.0784 (0.0784) loss_box_reg: 0.0194 (0.0194) loss_objectness: 0.0293 (0.0293) loss_rpn_box_reg: 0.0487 (0.0487) time: 1.8976 data: 0.2766 max mem: 3761
Epoch: [5] [10/148] eta: 0:04:11 lr: 0.000500 loss: 0.2063 (0.1902) loss_classifier: 0.0755 (0.0750) loss_box_reg: 0.0281 (0.0280) loss_objectness: 0.0283 (0.0401) loss_rpn_box_reg: 0.0487 (0.0471) time: 1.8203 data: 0.0304 max mem: 3761
Epoch: [5] [20/148] eta: 0:03:58 lr: 0.000500 loss: 0.1665 (0.1835) loss_classifier: 0.0700 (0.0705) loss_box_reg: 0.0235 (0.0283) loss_objectness: 0.0282 (0.0325) loss_rpn_box_reg: 0.0495 (0.0522) time: 1.8586 data: 0.0052 max mem: 3761
Epoch: [5] [30/148] eta: 0:03:44 lr: 0.000500 loss: 0.1426 (0.1689) loss_classifier: 0.0546 (0.0636) loss_box_reg: 0.0174 (0.0257) loss_objectness: 0.0165 (0.0297) loss_rpn_box_reg: 0.0398 (0.0500) time: 1.9505 data: 0.0055 max mem: 3761
Epoch: [5] [40/148] eta: 0:03:23 lr: 0.000500 loss: 0.1403 (0.1749) loss_classifier: 0.0428 (0.0619) loss_box_reg: 0.0144 (0.0252) loss_objectness: 0.0259 (0.0358) loss_rpn_box_reg: 0.0398 (0.0520) time: 1.9030 data: 0.0063 max mem: 3761
Epoch: [5] [50/148] eta: 0:03:01 lr: 0.000500 loss: 0.1678 (0.1759) loss_classifier: 0.0540 (0.0606) loss_box_reg: 0.0174 (0.0241) loss_objectness: 0.0297 (0.0366) loss_rpn_box_reg: 0.0552 (0.0545) time: 1.7638 data: 0.0060 max mem: 3761
Epoch: [5] [60/148] eta: 0:02:42 lr: 0.000500 loss: 0.1658 (0.1785) loss_classifier: 0.0573 (0.0613) loss_box_reg: 0.0199 (0.0244) loss_objectness: 0.0255 (0.0376) loss_rpn_box_reg: 0.0552 (0.0553) time: 1.7674 data: 0.0060 max mem: 3761
Epoch: [5] [70/148] eta: 0:02:21 lr: 0.000500 loss: 0.1752 (0.1793) loss_classifier: 0.0615 (0.0622) loss_box_reg: 0.0273 (0.0254) loss_objectness: 0.0255 (0.0365) loss_rpn_box_reg: 0.0548 (0.0552) time: 1.7228 data: 0.0064 max mem: 3761
Epoch: [5] [80/148] eta: 0:02:03 lr: 0.000500 loss: 0.1399 (0.1717) loss_classifier: 0.0553 (0.0604) loss_box_reg: 0.0189 (0.0241) loss_objectness: 0.0184 (0.0341) loss_rpn_box_reg: 0.0425 (0.0531) time: 1.7222 data: 0.0064 max mem: 3761
Epoch: [5] [90/148] eta: 0:01:45 lr: 0.000500 loss: 0.1413 (0.1733) loss_classifier: 0.0494 (0.0605) loss_box_reg: 0.0147 (0.0244) loss_objectness: 0.0196 (0.0339) loss_rpn_box_reg: 0.0455 (0.0545) time: 1.8385 data: 0.0060 max mem: 3761
Epoch: [5] [100/148] eta: 0:01:28 lr: 0.000500 loss: 0.1541 (0.


```

1701) loss_classifier: 0.0485 (0.0598) loss_box_reg: 0.0141 (0.02
35) loss_objectness: 0.0253 (0.0327) loss_rpn_box_reg: 0.0534 (0.
0541) time: 1.9343 data: 0.0061 max mem: 3761
Epoch: [5] [110/148] eta: 0:01:10 lr: 0.000500 loss: 0.1357 (0.
1678) loss_classifier: 0.0458 (0.0593) loss_box_reg: 0.0130 (0.02
32) loss_objectness: 0.0243 (0.0325) loss_rpn_box_reg: 0.0392 (0.
0529) time: 1.9598 data: 0.0060 max mem: 3761
Epoch: [5] [120/148] eta: 0:00:51 lr: 0.000500 loss: 0.1608 (0.
1728) loss_classifier: 0.0591 (0.0603) loss_box_reg: 0.0231 (0.02
39) loss_objectness: 0.0243 (0.0344) loss_rpn_box_reg: 0.0420 (0.
0543) time: 1.8663 data: 0.0061 max mem: 3761
Epoch: [5] [130/148] eta: 0:00:33 lr: 0.000500 loss: 0.1927 (0.
1736) loss_classifier: 0.0692 (0.0614) loss_box_reg: 0.0332 (0.02
51) loss_objectness: 0.0199 (0.0332) loss_rpn_box_reg: 0.0487 (0.
0539) time: 2.0217 data: 0.0063 max mem: 3761
Epoch: [5] [140/148] eta: 0:00:15 lr: 0.000500 loss: 0.1591 (0.
1740) loss_classifier: 0.0639 (0.0612) loss_box_reg: 0.0264 (0.02
52) loss_objectness: 0.0176 (0.0338) loss_rpn_box_reg: 0.0479 (0.
0537) time: 2.1155 data: 0.0061 max mem: 3761
Epoch: [5] [147/148] eta: 0:00:01 lr: 0.000500 loss: 0.1591 (0.
1737) loss_classifier: 0.0624 (0.0612) loss_box_reg: 0.0258 (0.02
54) loss_objectness: 0.0204 (0.0337) loss_rpn_box_reg: 0.0435 (0.
0534) time: 2.0105 data: 0.0061 max mem: 3761
Epoch: [5] Total time: 0:04:38 (1.8825 s / it)
creating index...
index created!
Test: [ 0/34] eta: 0:00:32 model_time: 0.7186 (0.7186) evaluato
r_time: 0.0041 (0.0041) time: 0.9665 data: 0.2414 max mem: 3761
Test: [33/34] eta: 0:00:00 model_time: 0.6924 (0.6982) evaluato
r_time: 0.0041 (0.0036) time: 0.7107 data: 0.0058 max mem: 3761
Test: Total time: 0:00:24 (0.7171 s / it)
Averaged stats: model_time: 0.6924 (0.6982) evaluator_time: 0.0041
(0.0036)
Accumulating evaluation results...
DONE (t=0.05s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.441
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.543
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.508
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.591
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.449
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.578
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.842
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.842
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.790
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.848
creating index...

```

index created!

Test: [0/148] eta: 0:03:25 model_time: 1.1415 (1.1415) evaluator_time: 0.0038 (0.0038) time: 1.3859 data: 0.2375 max mem: 3761

Test: [100/148] eta: 0:00:39 model_time: 0.6958 (0.8121) evaluator_time: 0.0034 (0.0034) time: 0.7441 data: 0.0062 max mem: 3761

Test: [147/148] eta: 0:00:00 model_time: 0.6966 (0.8041) evaluator_time: 0.0029 (0.0033) time: 0.8027 data: 0.0057 max mem: 3761

Test: Total time: 0:02:00 (0.8170 s / it)

Averaged stats: model_time: 0.6966 (0.8041) evaluator_time: 0.0029 (0.0033)

Accumulating evaluation results...

DONE (t=0.11s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.168

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.242

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.174

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.217

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.168

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.380

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.479

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.479

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.512

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.476

Epoch: [6] [0/148] eta: 0:04:34 lr: 0.000050 loss: 0.0840 (0.0840) loss_classifier: 0.0477 (0.0477) loss_box_reg: 0.0131 (0.0131) loss_objectness: 0.0054 (0.0054) loss_rpn_box_reg: 0.0178 (0.0178) time: 1.8523 data: 0.2368 max mem: 3761

Epoch: [6] [10/148] eta: 0:04:22 lr: 0.000050 loss: 0.1163 (0.1544) loss_classifier: 0.0477 (0.0457) loss_box_reg: 0.0177 (0.0187) loss_objectness: 0.0212 (0.0362) loss_rpn_box_reg: 0.0511 (0.0538) time: 1.9045 data: 0.0298 max mem: 3761

Epoch: [6] [20/148] eta: 0:03:57 lr: 0.000050 loss: 0.1403 (0.1618) loss_classifier: 0.0478 (0.0538) loss_box_reg: 0.0177 (0.0209) loss_objectness: 0.0215 (0.0388) loss_rpn_box_reg: 0.0431 (0.0483) time: 1.8590 data: 0.0061 max mem: 3761

Epoch: [6] [30/148] eta: 0:03:33 lr: 0.000050 loss: 0.1400 (0.1554) loss_classifier: 0.0519 (0.0533) loss_box_reg: 0.0184 (0.0211) loss_objectness: 0.0257 (0.0349) loss_rpn_box_reg: 0.0348 (0.0460) time: 1.7618 data: 0.0046 max mem: 3761

Epoch: [6] [40/148] eta: 0:03:20 lr: 0.000050 loss: 0.1325 (0.1519) loss_classifier: 0.0579 (0.0557) loss_box_reg: 0.0197 (0.0210) loss_objectness: 0.0191 (0.0316) loss_rpn_box_reg: 0.0348 (0.0436) time: 1.8615 data: 0.0061 max mem: 3761

Epoch: [6] [50/148] eta: 0:03:06 lr: 0.000050 loss: 0.1563 (0.

```
1628) loss_classifier: 0.0684 (0.0579) loss_box_reg: 0.0239 (0.02
35) loss_objectness: 0.0172 (0.0352) loss_rpn_box_reg: 0.0422 (0.
0463) time: 2.0551 data: 0.0061 max mem: 3761
Epoch: [6] [ 60/148] eta: 0:02:46 lr: 0.000050 loss: 0.1550 (0.
1617) loss_classifier: 0.0557 (0.0577) loss_box_reg: 0.0237 (0.02
35) loss_objectness: 0.0237 (0.0357) loss_rpn_box_reg: 0.0422 (0.
0449) time: 1.9611 data: 0.0061 max mem: 3761
Epoch: [6] [ 70/148] eta: 0:02:25 lr: 0.000050 loss: 0.1550 (0.
1663) loss_classifier: 0.0557 (0.0585) loss_box_reg: 0.0203 (0.02
42) loss_objectness: 0.0343 (0.0377) loss_rpn_box_reg: 0.0435 (0.
0459) time: 1.7692 data: 0.0063 max mem: 3761
Epoch: [6] [ 80/148] eta: 0:02:08 lr: 0.000050 loss: 0.1362 (0.
1657) loss_classifier: 0.0645 (0.0609) loss_box_reg: 0.0198 (0.02
44) loss_objectness: 0.0193 (0.0359) loss_rpn_box_reg: 0.0392 (0.
0445) time: 1.8656 data: 0.0064 max mem: 3761
Epoch: [6] [ 90/148] eta: 0:01:49 lr: 0.000050 loss: 0.1265 (0.
1633) loss_classifier: 0.0634 (0.0606) loss_box_reg: 0.0179 (0.02
38) loss_objectness: 0.0192 (0.0352) loss_rpn_box_reg: 0.0328 (0.
0438) time: 1.9257 data: 0.0063 max mem: 3761
Epoch: [6] [100/148] eta: 0:01:31 lr: 0.000050 loss: 0.1363 (0.
1624) loss_classifier: 0.0565 (0.0602) loss_box_reg: 0.0170 (0.02
35) loss_objectness: 0.0258 (0.0347) loss_rpn_box_reg: 0.0347 (0.
0439) time: 1.9700 data: 0.0062 max mem: 3761
Epoch: [6] [110/148] eta: 0:01:12 lr: 0.000050 loss: 0.1489 (0.
1619) loss_classifier: 0.0504 (0.0600) loss_box_reg: 0.0170 (0.02
40) loss_objectness: 0.0273 (0.0338) loss_rpn_box_reg: 0.0360 (0.
0441) time: 1.9604 data: 0.0062 max mem: 3761
Epoch: [6] [120/148] eta: 0:00:53 lr: 0.000050 loss: 0.1455 (0.
1599) loss_classifier: 0.0458 (0.0588) loss_box_reg: 0.0146 (0.02
34) loss_objectness: 0.0268 (0.0334) loss_rpn_box_reg: 0.0407 (0.
0443) time: 1.8628 data: 0.0062 max mem: 3761
Epoch: [6] [130/148] eta: 0:00:34 lr: 0.000050 loss: 0.1455 (0.
1596) loss_classifier: 0.0496 (0.0591) loss_box_reg: 0.0157 (0.02
31) loss_objectness: 0.0268 (0.0329) loss_rpn_box_reg: 0.0440 (0.
0445) time: 1.9105 data: 0.0061 max mem: 3761
Epoch: [6] [140/148] eta: 0:00:15 lr: 0.000050 loss: 0.1555 (0.
1608) loss_classifier: 0.0515 (0.0593) loss_box_reg: 0.0186 (0.02
34) loss_objectness: 0.0234 (0.0335) loss_rpn_box_reg: 0.0464 (0.
0446) time: 1.8644 data: 0.0061 max mem: 3761
Epoch: [6] [147/148] eta: 0:00:01 lr: 0.000050 loss: 0.1417 (0.
1596) loss_classifier: 0.0513 (0.0593) loss_box_reg: 0.0179 (0.02
32) loss_objectness: 0.0222 (0.0328) loss_rpn_box_reg: 0.0355 (0.
0444) time: 1.9623 data: 0.0062 max mem: 3761
Epoch: [6] Total time: 0:04:42 (1.9057 s / it)
creating index...
index created!
Test: [ 0/34] eta: 0:00:30 model_time: 0.6955 (0.6955) evaluato
r_time: 0.0043 (0.0043) time: 0.9046 data: 0.2025 max mem: 3761
Test: [33/34] eta: 0:00:00 model_time: 0.6924 (0.6963) evaluato
r_time: 0.0041 (0.0036) time: 0.7093 data: 0.0059 max mem: 3761
Test: Total time: 0:00:24 (0.7146 s / it)
Averaged stats: model_time: 0.6924 (0.6963) evaluator_time: 0.0041
(0.0036)
Accumulating evaluation results...
DONE (t=0.05s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.435
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.534
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
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00 ] = 0.506
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.595
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.442
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.572
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.849
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.849
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.810
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.853
creating index...
index created!
Test: [ 0/148] eta: 0:03:37 model_time: 1.1368 (1.1368) evalua
tor_time: 0.0055 (0.0055) time: 1.4703 data: 0.3248 max mem: 376
1
Test: [100/148] eta: 0:00:39 model_time: 0.6968 (0.8012) evalua
tor_time: 0.0034 (0.0032) time: 0.7832 data: 0.0067 max mem: 376
1
Test: [147/148] eta: 0:00:00 model_time: 0.6958 (0.7993) evalua
tor_time: 0.0028 (0.0032) time: 0.8017 data: 0.0061 max mem: 376
1
Test: Total time: 0:02:00 (0.8124 s / it)
Averaged stats: model_time: 0.6958 (0.7993) evaluator_time: 0.0028
(0.0032)
Accumulating evaluation results...
DONE (t=0.11s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.173
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.248
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.184
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.138
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.179
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.392
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.474
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.474
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.354
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.481
Epoch: [7] [ 0/148] eta: 0:04:37 lr: 0.000050 loss: 0.1930 (0.

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1930) loss_classifier: 0.0689 (0.0689) loss_box_reg: 0.0341 (0.0341) loss_objectness: 0.0503 (0.0503) loss_rpn_box_reg: 0.0397 (0.0397) time: 1.8733 data: 0.2339 max mem: 3761
Epoch: [7] [10/148] eta: 0:04:10 lr: 0.000050 loss: 0.1218 (0.1532) loss_classifier: 0.0387 (0.0449) loss_box_reg: 0.0186 (0.0197) loss_objectness: 0.0339 (0.0431) loss_rpn_box_reg: 0.0397 (0.0456) time: 1.8155 data: 0.0286 max mem: 3761
Epoch: [7] [20/148] eta: 0:03:51 lr: 0.000050 loss: 0.1218 (0.1517) loss_classifier: 0.0392 (0.0482) loss_box_reg: 0.0159 (0.0197) loss_objectness: 0.0332 (0.0396) loss_rpn_box_reg: 0.0348 (0.0442) time: 1.8073 data: 0.0056 max mem: 3761
Epoch: [7] [30/148] eta: 0:03:37 lr: 0.000050 loss: 0.1497 (0.1519) loss_classifier: 0.0507 (0.0519) loss_box_reg: 0.0179 (0.0218) loss_objectness: 0.0255 (0.0370) loss_rpn_box_reg: 0.0289 (0.0411) time: 1.8543 data: 0.0046 max mem: 3761
Epoch: [7] [40/148] eta: 0:03:18 lr: 0.000050 loss: 0.1526 (0.1553) loss_classifier: 0.0617 (0.0548) loss_box_reg: 0.0209 (0.0222) loss_objectness: 0.0265 (0.0364) loss_rpn_box_reg: 0.0384 (0.0419) time: 1.8711 data: 0.0061 max mem: 3761
Epoch: [7] [50/148] eta: 0:03:05 lr: 0.000050 loss: 0.1672 (0.1613) loss_classifier: 0.0641 (0.0586) loss_box_reg: 0.0215 (0.0240) loss_objectness: 0.0289 (0.0355) loss_rpn_box_reg: 0.0423 (0.0432) time: 1.9754 data: 0.0062 max mem: 3761
Epoch: [7] [60/148] eta: 0:02:48 lr: 0.000050 loss: 0.1637 (0.1589) loss_classifier: 0.0674 (0.0593) loss_box_reg: 0.0223 (0.0237) loss_objectness: 0.0233 (0.0342) loss_rpn_box_reg: 0.0411 (0.0417) time: 2.0633 data: 0.0061 max mem: 3761
Epoch: [7] [70/148] eta: 0:02:29 lr: 0.000050 loss: 0.1384 (0.1562) loss_classifier: 0.0544 (0.0585) loss_box_reg: 0.0178 (0.0229) loss_objectness: 0.0172 (0.0339) loss_rpn_box_reg: 0.0293 (0.0408) time: 1.9718 data: 0.0061 max mem: 3761
Epoch: [7] [80/148] eta: 0:02:11 lr: 0.000050 loss: 0.1200 (0.1565) loss_classifier: 0.0475 (0.0585) loss_box_reg: 0.0157 (0.0224) loss_objectness: 0.0198 (0.0341) loss_rpn_box_reg: 0.0375 (0.0414) time: 2.0202 data: 0.0063 max mem: 3761
Epoch: [7] [90/148] eta: 0:01:51 lr: 0.000050 loss: 0.1603 (0.1617) loss_classifier: 0.0627 (0.0599) loss_box_reg: 0.0166 (0.0237) loss_objectness: 0.0349 (0.0356) loss_rpn_box_reg: 0.0427 (0.0425) time: 1.9653 data: 0.0062 max mem: 3761
Epoch: [7] [100/148] eta: 0:01:31 lr: 0.000050 loss: 0.1414 (0.1578) loss_classifier: 0.0535 (0.0584) loss_box_reg: 0.0224 (0.0232) loss_objectness: 0.0231 (0.0339) loss_rpn_box_reg: 0.0440 (0.0423) time: 1.8176 data: 0.0062 max mem: 3761
Epoch: [7] [110/148] eta: 0:01:13 lr: 0.000050 loss: 0.1328 (0.1572) loss_classifier: 0.0486 (0.0588) loss_box_reg: 0.0153 (0.0227) loss_objectness: 0.0152 (0.0333) loss_rpn_box_reg: 0.0440 (0.0423) time: 1.9124 data: 0.0062 max mem: 3761
Epoch: [7] [120/148] eta: 0:00:53 lr: 0.000050 loss: 0.1502 (0.1588) loss_classifier: 0.0726 (0.0598) loss_box_reg: 0.0186 (0.0234) loss_objectness: 0.0289 (0.0328) loss_rpn_box_reg: 0.0354 (0.0427) time: 1.8643 data: 0.0062 max mem: 3761
Epoch: [7] [130/148] eta: 0:00:34 lr: 0.000050 loss: 0.1502 (0.1585) loss_classifier: 0.0600 (0.0589) loss_box_reg: 0.0202 (0.0233) loss_objectness: 0.0244 (0.0332) loss_rpn_box_reg: 0.0333 (0.0431) time: 1.8150 data: 0.0061 max mem: 3761
Epoch: [7] [140/148] eta: 0:00:15 lr: 0.000050 loss: 0.1436 (0.1576) loss_classifier: 0.0437 (0.0578) loss_box_reg: 0.0148 (0.0234) loss_objectness: 0.0256 (0.0333) loss_rpn_box_reg: 0.0429 (0.0432) time: 1.8635 data: 0.0062 max mem: 3761
Epoch: [7] [147/148] eta: 0:00:01 lr: 0.000050 loss: 0.1247 (0.1569) loss_classifier: 0.0469 (0.0578) loss_box_reg: 0.0162 (0.02

33) loss_objectness: 0.0226 (0.0328) loss_rpn_box_reg: 0.0435 (0.0430) time: 1.8153 data: 0.0062 max mem: 3761

Epoch: [7] Total time: 0:04:40 (1.8946 s / it)

creating index...

index created!

Test: [0/34] eta: 0:00:31 model_time: 0.7034 (0.7034) evaluator_time: 0.0045 (0.0045) time: 0.9402 data: 0.2299 max mem: 3761

Test: [33/34] eta: 0:00:00 model_time: 0.6933 (0.6973) evaluator_time: 0.0037 (0.0035) time: 0.7094 data: 0.0057 max mem: 3761

Test: Total time: 0:00:24 (0.7158 s / it)

Averaged stats: model_time: 0.6933 (0.6973) evaluator_time: 0.0037 (0.0035)

Accumulating evaluation results...

DONE (t=0.05s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.437

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.536

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.514

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.632

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.446

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.561

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.847

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.847

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.807

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.851

creating index...

index created!

Test: [0/148] eta: 0:03:30 model_time: 1.1759 (1.1759) evaluator_time: 0.0037 (0.0037) time: 1.4192 data: 0.2366 max mem: 3761

Test: [100/148] eta: 0:00:39 model_time: 0.6994 (0.8051) evaluator_time: 0.0029 (0.0032) time: 0.8070 data: 0.0065 max mem: 3761

Test: [147/148] eta: 0:00:00 model_time: 0.6996 (0.7943) evaluator_time: 0.0037 (0.0033) time: 0.7831 data: 0.0061 max mem: 3761

Test: Total time: 0:01:59 (0.8075 s / it)

Averaged stats: model_time: 0.6996 (0.7943) evaluator_time: 0.0037 (0.0033)

Accumulating evaluation results...

DONE (t=0.11s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.220

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.310

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.310

```
00 ] = 0.244
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.158
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.226
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.435
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.554
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.554
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.333
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.565
Epoch: [8] [ 0/148] eta: 0:07:10 lr: 0.000050 loss: 0.1233 (0.
1233) loss_classifier: 0.0634 (0.0634) loss_box_reg: 0.0131 (0.01
31) loss_objectness: 0.0048 (0.0048) loss_rpn_box_reg: 0.0419 (0.
0419) time: 2.9074 data: 0.3325 max mem: 3761
Epoch: [8] [ 10/148] eta: 0:04:23 lr: 0.000050 loss: 0.1233 (0.
1422) loss_classifier: 0.0609 (0.0601) loss_box_reg: 0.0132 (0.02
29) loss_objectness: 0.0177 (0.0223) loss_rpn_box_reg: 0.0365 (0.
0368) time: 1.9088 data: 0.0341 max mem: 3761
Epoch: [8] [ 20/148] eta: 0:03:52 lr: 0.000050 loss: 0.1371 (0.
1440) loss_classifier: 0.0632 (0.0621) loss_box_reg: 0.0242 (0.02
37) loss_objectness: 0.0188 (0.0247) loss_rpn_box_reg: 0.0343 (0.
0336) time: 1.7625 data: 0.0038 max mem: 3761
Epoch: [8] [ 30/148] eta: 0:03:35 lr: 0.000050 loss: 0.1509 (0.
1458) loss_classifier: 0.0655 (0.0613) loss_box_reg: 0.0225 (0.02
37) loss_objectness: 0.0227 (0.0240) loss_rpn_box_reg: 0.0333 (0.
0368) time: 1.7784 data: 0.0046 max mem: 3761
Epoch: [8] [ 40/148] eta: 0:03:11 lr: 0.000050 loss: 0.1351 (0.
1479) loss_classifier: 0.0465 (0.0596) loss_box_reg: 0.0219 (0.02
41) loss_objectness: 0.0253 (0.0269) loss_rpn_box_reg: 0.0353 (0.
0374) time: 1.7344 data: 0.0060 max mem: 3761
Epoch: [8] [ 50/148] eta: 0:02:54 lr: 0.000050 loss: 0.1267 (0.
1522) loss_classifier: 0.0450 (0.0603) loss_box_reg: 0.0128 (0.02
42) loss_objectness: 0.0239 (0.0297) loss_rpn_box_reg: 0.0329 (0.
0381) time: 1.7221 data: 0.0064 max mem: 3761
Epoch: [8] [ 60/148] eta: 0:02:36 lr: 0.000050 loss: 0.1575 (0.
1537) loss_classifier: 0.0490 (0.0600) loss_box_reg: 0.0167 (0.02
41) loss_objectness: 0.0239 (0.0309) loss_rpn_box_reg: 0.0353 (0.
0388) time: 1.7776 data: 0.0064 max mem: 3761
Epoch: [8] [ 70/148] eta: 0:02:20 lr: 0.000050 loss: 0.1842 (0.
1637) loss_classifier: 0.0684 (0.0613) loss_box_reg: 0.0227 (0.02
51) loss_objectness: 0.0353 (0.0351) loss_rpn_box_reg: 0.0494 (0.
0423) time: 1.8232 data: 0.0061 max mem: 3761
Epoch: [8] [ 80/148] eta: 0:02:04 lr: 0.000050 loss: 0.1545 (0.
1628) loss_classifier: 0.0640 (0.0610) loss_box_reg: 0.0227 (0.02
47) loss_objectness: 0.0213 (0.0354) loss_rpn_box_reg: 0.0409 (0.
0417) time: 1.9681 data: 0.0061 max mem: 3761
Epoch: [8] [ 90/148] eta: 0:01:45 lr: 0.000050 loss: 0.1487 (0.
1610) loss_classifier: 0.0495 (0.0597) loss_box_reg: 0.0126 (0.02
35) loss_objectness: 0.0181 (0.0352) loss_rpn_box_reg: 0.0321 (0.
0425) time: 1.9325 data: 0.0062 max mem: 3761
Epoch: [8] [100/148] eta: 0:01:27 lr: 0.000050 loss: 0.1478 (0.
1592) loss_classifier: 0.0467 (0.0591) loss_box_reg: 0.0130 (0.02
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37) loss_objectness: 0.0181 (0.0342) loss_rpn_box_reg: 0.0282 (0.
0423) time: 1.7879 data: 0.0063 max mem: 3761
Epoch: [8] [110/148] eta: 0:01:09 lr: 0.000050 loss: 0.1284 (0.
1571) loss_classifier: 0.0467 (0.0588) loss_box_reg: 0.0179 (0.02
34) loss_objectness: 0.0173 (0.0330) loss_rpn_box_reg: 0.0324 (0.
0420) time: 1.8233 data: 0.0063 max mem: 3761
Epoch: [8] [120/148] eta: 0:00:51 lr: 0.000050 loss: 0.1287 (0.
1574) loss_classifier: 0.0532 (0.0589) loss_box_reg: 0.0179 (0.02
38) loss_objectness: 0.0228 (0.0327) loss_rpn_box_reg: 0.0396 (0.
0421) time: 1.9559 data: 0.0062 max mem: 3761
Epoch: [8] [130/148] eta: 0:00:33 lr: 0.000050 loss: 0.1571 (0.
1569) loss_classifier: 0.0575 (0.0590) loss_box_reg: 0.0209 (0.02
38) loss_objectness: 0.0241 (0.0317) loss_rpn_box_reg: 0.0396 (0.
0424) time: 2.0058 data: 0.0061 max mem: 3761
Epoch: [8] [140/148] eta: 0:00:14 lr: 0.000050 loss: 0.1139 (0.
1546) loss_classifier: 0.0442 (0.0579) loss_box_reg: 0.0145 (0.02
34) loss_objectness: 0.0241 (0.0312) loss_rpn_box_reg: 0.0371 (0.
0422) time: 2.0059 data: 0.0064 max mem: 3761
Epoch: [8] [147/148] eta: 0:00:01 lr: 0.000050 loss: 0.1352 (0.
1544) loss_classifier: 0.0473 (0.0581) loss_box_reg: 0.0139 (0.02
34) loss_objectness: 0.0219 (0.0311) loss_rpn_box_reg: 0.0371 (0.
0419) time: 1.9093 data: 0.0065 max mem: 3761
Epoch: [8] Total time: 0:04:35 (1.8589 s / it)
creating index...
index created!
Test: [ 0/34] eta: 0:00:33 model_time: 0.7118 (0.7118) evaluato
r_time: 0.0036 (0.0036) time: 0.9769 data: 0.2590 max mem: 3761
Test: [33/34] eta: 0:00:00 model_time: 0.6927 (0.6983) evaluato
r_time: 0.0038 (0.0035) time: 0.7098 data: 0.0057 max mem: 3761
Test: Total time: 0:00:24 (0.7179 s / it)
Averaged stats: model_time: 0.6927 (0.6983) evaluator_time: 0.0038
(0.0035)
Accumulating evaluation results...
DONE (t=0.06s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.437
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.539
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.511
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.609
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.445
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.570
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.844
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.844
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.813
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.848
creating index...
index created!

```



```
Test: [ 0/148] eta: 0:02:25 model_time: 0.7738 (0.7738) evalua
tor_time: 0.0036 (0.0036) time: 0.9845 data: 0.2041 max mem: 376
1
Test: [100/148] eta: 0:00:39 model_time: 0.6968 (0.8061) evalua
tor_time: 0.0031 (0.0033) time: 0.7695 data: 0.0061 max mem: 376
1
Test: [147/148] eta: 0:00:00 model_time: 0.6992 (0.8077) evalua
tor_time: 0.0025 (0.0032) time: 0.8408 data: 0.0058 max mem: 376
1
Test: Total time: 0:02:01 (0.8206 s / it)
Averaged stats: model_time: 0.6992 (0.8077) evaluator_time: 0.0025
(0.0032)
Accumulating evaluation results...
DONE (t=0.11s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.213
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.299
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.226
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.290
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.213
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.439
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.556
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.556
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.530
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.557
Epoch: [9] [ 0/148] eta: 0:04:41 lr: 0.000005 loss: 0.1645 (0.
1645) loss_classifier: 0.0657 (0.0657) loss_box_reg: 0.0465 (0.04
65) loss_objectness: 0.0200 (0.0200) loss_rpn_box_reg: 0.0322 (0.
0322) time: 1.9025 data: 0.2969 max mem: 3761
Epoch: [9] [ 10/148] eta: 0:04:34 lr: 0.000005 loss: 0.1521 (0.
1479) loss_classifier: 0.0609 (0.0613) loss_box_reg: 0.0217 (0.02
72) loss_objectness: 0.0228 (0.0220) loss_rpn_box_reg: 0.0360 (0.
0374) time: 1.9907 data: 0.0327 max mem: 3761
Epoch: [9] [ 20/148] eta: 0:04:15 lr: 0.000005 loss: 0.1386 (0.
1469) loss_classifier: 0.0609 (0.0610) loss_box_reg: 0.0188 (0.02
43) loss_objectness: 0.0229 (0.0243) loss_rpn_box_reg: 0.0360 (0.
0374) time: 2.0019 data: 0.0054 max mem: 3761
Epoch: [9] [ 30/148] eta: 0:03:48 lr: 0.000005 loss: 0.1384 (0.
1582) loss_classifier: 0.0534 (0.0613) loss_box_reg: 0.0163 (0.02
40) loss_objectness: 0.0319 (0.0325) loss_rpn_box_reg: 0.0356 (0.
0405) time: 1.9093 data: 0.0052 max mem: 3761
Epoch: [9] [ 40/148] eta: 0:03:30 lr: 0.000005 loss: 0.1221 (0.
1487) loss_classifier: 0.0439 (0.0583) loss_box_reg: 0.0127 (0.02
10) loss_objectness: 0.0234 (0.0295) loss_rpn_box_reg: 0.0355 (0.
0399) time: 1.9045 data: 0.0064 max mem: 3761
Epoch: [9] [ 50/148] eta: 0:03:12 lr: 0.000005 loss: 0.1192 (0.
1539) loss_classifier: 0.0539 (0.0583) loss_box_reg: 0.0163 (0.02
```

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15) loss_objectness: 0.0197 (0.0330) loss_rpn_box_reg: 0.0303 (0.0410) time: 2.0001 data: 0.0065 max mem: 3761
Epoch: [9] [ 60/148] eta: 0:02:49 lr: 0.000005 loss: 0.1429 (0.1588) loss_classifier: 0.0573 (0.0593) loss_box_reg: 0.0231 (0.0228) loss_objectness: 0.0238 (0.0332) loss_rpn_box_reg: 0.0397 (0.0435) time: 1.8610 data: 0.0062 max mem: 3761
Epoch: [9] [ 70/148] eta: 0:02:28 lr: 0.000005 loss: 0.1805 (0.1639) loss_classifier: 0.0637 (0.0615) loss_box_reg: 0.0254 (0.0248) loss_objectness: 0.0262 (0.0328) loss_rpn_box_reg: 0.0598 (0.0448) time: 1.7637 data: 0.0062 max mem: 3761
Epoch: [9] [ 80/148] eta: 0:02:08 lr: 0.000005 loss: 0.1394 (0.1609) loss_classifier: 0.0559 (0.0602) loss_box_reg: 0.0220 (0.0242) loss_objectness: 0.0164 (0.0320) loss_rpn_box_reg: 0.0417 (0.0446) time: 1.8109 data: 0.0062 max mem: 3761
Epoch: [9] [ 90/148] eta: 0:01:49 lr: 0.000005 loss: 0.1397 (0.1610) loss_classifier: 0.0533 (0.0602) loss_box_reg: 0.0171 (0.0239) loss_objectness: 0.0230 (0.0330) loss_rpn_box_reg: 0.0328 (0.0440) time: 1.8120 data: 0.0065 max mem: 3761
Epoch: [9] [100/148] eta: 0:01:30 lr: 0.000005 loss: 0.1397 (0.1598) loss_classifier: 0.0499 (0.0592) loss_box_reg: 0.0166 (0.0234) loss_objectness: 0.0315 (0.0331) loss_rpn_box_reg: 0.0328 (0.0441) time: 1.8146 data: 0.0064 max mem: 3761
Epoch: [9] [110/148] eta: 0:01:12 lr: 0.000005 loss: 0.1142 (0.1582) loss_classifier: 0.0414 (0.0580) loss_box_reg: 0.0123 (0.0229) loss_objectness: 0.0249 (0.0337) loss_rpn_box_reg: 0.0312 (0.0436) time: 1.9569 data: 0.0061 max mem: 3761
Epoch: [9] [120/148] eta: 0:00:53 lr: 0.000005 loss: 0.1196 (0.1603) loss_classifier: 0.0525 (0.0594) loss_box_reg: 0.0123 (0.0233) loss_objectness: 0.0249 (0.0346) loss_rpn_box_reg: 0.0312 (0.0430) time: 2.0759 data: 0.0062 max mem: 3761
Epoch: [9] [130/148] eta: 0:00:34 lr: 0.000005 loss: 0.1305 (0.1578) loss_classifier: 0.0586 (0.0591) loss_box_reg: 0.0139 (0.0230) loss_objectness: 0.0206 (0.0339) loss_rpn_box_reg: 0.0267 (0.0418) time: 1.8872 data: 0.0062 max mem: 3761
Epoch: [9] [140/148] eta: 0:00:15 lr: 0.000005 loss: 0.1277 (0.1562) loss_classifier: 0.0449 (0.0582) loss_box_reg: 0.0124 (0.0227) loss_objectness: 0.0243 (0.0335) loss_rpn_box_reg: 0.0258 (0.0417) time: 1.7649 data: 0.0061 max mem: 3761
Epoch: [9] [147/148] eta: 0:00:01 lr: 0.000005 loss: 0.1356 (0.1550) loss_classifier: 0.0442 (0.0580) loss_box_reg: 0.0131 (0.0224) loss_objectness: 0.0193 (0.0330) loss_rpn_box_reg: 0.0377 (0.0416) time: 1.8616 data: 0.0062 max mem: 3761
Epoch: [9] Total time: 0:04:39 (1.8916 s / it)
creating index...
index created!
Test: [ 0/34] eta: 0:00:32 model_time: 0.7049 (0.7049) evaluator_time: 0.0037 (0.0037) time: 0.9457 data: 0.2348 max mem: 3761
Test: [33/34] eta: 0:00:00 model_time: 0.6954 (0.6971) evaluator_time: 0.0038 (0.0035) time: 0.7087 data: 0.0055 max mem: 3761
Test: Total time: 0:00:24 (0.7163 s / it)
Averaged stats: model_time: 0.6954 (0.6971) evaluator_time: 0.0038 (0.0035)
Accumulating evaluation results...
DONE (t=0.06s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.436
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.537
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.502
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Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.613
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.443
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.572
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.845
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.845
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.813
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.849
creating index...
index created!
Test: [ 0/148] eta: 0:03:35 model_time: 1.1452 (1.1452) evalua
tor_time: 0.0044 (0.0044) time: 1.4571 data: 0.3045 max mem: 376
1
Test: [100/148] eta: 0:00:39 model_time: 0.7002 (0.8101) evalua
tor_time: 0.0031 (0.0033) time: 0.8408 data: 0.0061 max mem: 376
1
Test: [147/148] eta: 0:00:00 model_time: 0.6965 (0.8083) evalua
tor_time: 0.0030 (0.0033) time: 0.8445 data: 0.0060 max mem: 376
1
Test: Total time: 0:02:01 (0.8217 s / it)
Averaged stats: model_time: 0.6965 (0.8083) evaluator_time: 0.0030
(0.0033)
Accumulating evaluation results...
DONE (t=0.11s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.213
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.299
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.227
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.208
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.216
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.435
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.533
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.533
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.459
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.536
Epoch: [10] [ 0/148] eta: 0:05:04 lr: 0.000005 loss: 0.1405
(0.1405) loss_classifier: 0.0292 (0.0292) loss_box_reg: 0.0094

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(0.0094) loss_objectness: 0.0489 (0.0489) loss_rpn_box_reg: 0.05
30 (0.0530) time: 2.0563 data: 0.4393 max mem: 3761
Epoch: [10] [10/148] eta: 0:04:16 lr: 0.000005 loss: 0.1501
(0.1922) loss_classifier: 0.0708 (0.0687) loss_box_reg: 0.0257
(0.0302) loss_objectness: 0.0276 (0.0413) loss_rpn_box_reg: 0.05
16 (0.0521) time: 1.8560 data: 0.0473 max mem: 3761
Epoch: [10] [20/148] eta: 0:04:08 lr: 0.000005 loss: 0.1470
(0.1663) loss_classifier: 0.0708 (0.0661) loss_box_reg: 0.0238
(0.0257) loss_objectness: 0.0245 (0.0327) loss_rpn_box_reg: 0.04
01 (0.0418) time: 1.9329 data: 0.0061 max mem: 3761
Epoch: [10] [30/148] eta: 0:03:40 lr: 0.000005 loss: 0.1277
(0.1561) loss_classifier: 0.0438 (0.0594) loss_box_reg: 0.0204
(0.0243) loss_objectness: 0.0243 (0.0322) loss_rpn_box_reg: 0.02
98 (0.0403) time: 1.8719 data: 0.0054 max mem: 3761
Epoch: [10] [40/148] eta: 0:03:25 lr: 0.000005 loss: 0.1173
(0.1478) loss_classifier: 0.0448 (0.0573) loss_box_reg: 0.0145
(0.0226) loss_objectness: 0.0264 (0.0300) loss_rpn_box_reg: 0.02
98 (0.0379) time: 1.8587 data: 0.0065 max mem: 3761
Epoch: [10] [50/148] eta: 0:03:04 lr: 0.000005 loss: 0.1110
(0.1474) loss_classifier: 0.0476 (0.0563) loss_box_reg: 0.0174
(0.0228) loss_objectness: 0.0134 (0.0292) loss_rpn_box_reg: 0.03
22 (0.0390) time: 1.9131 data: 0.0064 max mem: 3761
Epoch: [10] [60/148] eta: 0:02:42 lr: 0.000005 loss: 0.1583
(0.1499) loss_classifier: 0.0558 (0.0578) loss_box_reg: 0.0222
(0.0235) loss_objectness: 0.0229 (0.0285) loss_rpn_box_reg: 0.04
07 (0.0400) time: 1.7236 data: 0.0063 max mem: 3761
Epoch: [10] [70/148] eta: 0:02:27 lr: 0.000005 loss: 0.1460
(0.1471) loss_classifier: 0.0484 (0.0565) loss_box_reg: 0.0207
(0.0230) loss_objectness: 0.0226 (0.0281) loss_rpn_box_reg: 0.03
83 (0.0395) time: 1.9128 data: 0.0065 max mem: 3761
Epoch: [10] [80/148] eta: 0:02:08 lr: 0.000005 loss: 0.1247
(0.1494) loss_classifier: 0.0482 (0.0566) loss_box_reg: 0.0134
(0.0226) loss_objectness: 0.0141 (0.0296) loss_rpn_box_reg: 0.03
45 (0.0406) time: 2.0552 data: 0.0065 max mem: 3761
Epoch: [10] [90/148] eta: 0:01:49 lr: 0.000005 loss: 0.1435
(0.1495) loss_classifier: 0.0590 (0.0570) loss_box_reg: 0.0173
(0.0237) loss_objectness: 0.0138 (0.0284) loss_rpn_box_reg: 0.04
18 (0.0404) time: 1.9103 data: 0.0065 max mem: 3761
Epoch: [10] [100/148] eta: 0:01:30 lr: 0.000005 loss: 0.1357
(0.1500) loss_classifier: 0.0600 (0.0571) loss_box_reg: 0.0173
(0.0234) loss_objectness: 0.0168 (0.0279) loss_rpn_box_reg: 0.04
26 (0.0416) time: 1.8661 data: 0.0064 max mem: 3761
Epoch: [10] [110/148] eta: 0:01:10 lr: 0.000005 loss: 0.1357
(0.1510) loss_classifier: 0.0469 (0.0568) loss_box_reg: 0.0145
(0.0230) loss_objectness: 0.0268 (0.0295) loss_rpn_box_reg: 0.04
53 (0.0416) time: 1.7322 data: 0.0061 max mem: 3761
Epoch: [10] [120/148] eta: 0:00:51 lr: 0.000005 loss: 0.1346
(0.1503) loss_classifier: 0.0544 (0.0572) loss_box_reg: 0.0171
(0.0227) loss_objectness: 0.0254 (0.0293) loss_rpn_box_reg: 0.03
50 (0.0411) time: 1.6938 data: 0.0065 max mem: 3761
Epoch: [10] [130/148] eta: 0:00:33 lr: 0.000005 loss: 0.1432
(0.1516) loss_classifier: 0.0612 (0.0574) loss_box_reg: 0.0177
(0.0232) loss_objectness: 0.0259 (0.0299) loss_rpn_box_reg: 0.03
50 (0.0410) time: 1.7811 data: 0.0067 max mem: 3761
Epoch: [10] [140/148] eta: 0:00:14 lr: 0.000005 loss: 0.1544
(0.1548) loss_classifier: 0.0559 (0.0585) loss_box_reg: 0.0192
(0.0234) loss_objectness: 0.0296 (0.0319) loss_rpn_box_reg: 0.04
07 (0.0409) time: 1.8184 data: 0.0064 max mem: 3761
Epoch: [10] [147/148] eta: 0:00:01 lr: 0.000005 loss: 0.1338
(0.1540) loss_classifier: 0.0548 (0.0585) loss_box_reg: 0.0170
(0.0231) loss_objectness: 0.0296 (0.0318) loss_rpn_box_reg: 0.03

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17 (0.0406) time: 1.8386 data: 0.0066 max mem: 3761
Epoch: [10] Total time: 0:04:33 (1.8506 s / it)
creating index...
index created!
Test: [ 0/34] eta: 0:00:33 model_time: 0.7131 (0.7131) evaluator_time: 0.0036 (0.0036) time: 0.9872 data: 0.2683 max mem: 3761
Test: [33/34] eta: 0:00:00 model_time: 0.6950 (0.6985) evaluator_time: 0.0040 (0.0035) time: 0.7104 data: 0.0056 max mem: 3761
Test: Total time: 0:00:24 (0.7184 s / it)
Averaged stats: model_time: 0.6950 (0.6985) evaluator_time: 0.0040 (0.0035)
Accumulating evaluation results...
DONE (t=0.06s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.436
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.538
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.506
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.606
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.445
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.571
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.844
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 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.813
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.848
creating index...
index created!
Test: [ 0/148] eta: 0:02:35 model_time: 0.7994 (0.7994) evaluator_time: 0.0075 (0.0075) time: 1.0511 data: 0.2419 max mem: 3761
Test: [100/148] eta: 0:00:38 model_time: 0.7044 (0.7864) evaluator_time: 0.0027 (0.0033) time: 0.8349 data: 0.0066 max mem: 3761
Test: [147/148] eta: 0:00:00 model_time: 0.7030 (0.7920) evaluator_time: 0.0032 (0.0033) time: 0.8653 data: 0.0064 max mem: 3761
Test: Total time: 0:01:59 (0.8058 s / it)
Averaged stats: model_time: 0.7030 (0.7920) evaluator_time: 0.0032 (0.0033)
Accumulating evaluation results...
DONE (t=0.11s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.165
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.240
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.177
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Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000
Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.363
Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.163
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.382
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.482
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.482
Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000
Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.698
Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.472
Epoch: [11] [0/148] eta: 0:04:45 lr: 0.000005 loss: 0.2034
(0.2034) loss_classifier: 0.0413 (0.0413) loss_box_reg: 0.0187
(0.0187) loss_objectness: 0.0746 (0.0746) loss_rpn_box_reg: 0.0688 (0.0688) time: 1.9315 data: 0.3081 max mem: 3761
Epoch: [11] [10/148] eta: 0:04:24 lr: 0.000005 loss: 0.1377
(0.1495) loss_classifier: 0.0561 (0.0513) loss_box_reg: 0.0208
(0.0267) loss_objectness: 0.0149 (0.0271) loss_rpn_box_reg: 0.0410 (0.0445) time: 1.9133 data: 0.0347 max mem: 3761
Epoch: [11] [20/148] eta: 0:03:58 lr: 0.000005 loss: 0.1445
(0.1559) loss_classifier: 0.0617 (0.0581) loss_box_reg: 0.0237
(0.0266) loss_objectness: 0.0124 (0.0258) loss_rpn_box_reg: 0.0410 (0.0454) time: 1.8633 data: 0.0064 max mem: 3761
Epoch: [11] [30/148] eta: 0:03:45 lr: 0.000005 loss: 0.1467
(0.1580) loss_classifier: 0.0659 (0.0624) loss_box_reg: 0.0237
(0.0263) loss_objectness: 0.0173 (0.0253) loss_rpn_box_reg: 0.0363 (0.0440) time: 1.9124 data: 0.0064 max mem: 3761
Epoch: [11] [40/148] eta: 0:03:21 lr: 0.000005 loss: 0.1467
(0.1599) loss_classifier: 0.0519 (0.0594) loss_box_reg: 0.0166
(0.0253) loss_objectness: 0.0237 (0.0295) loss_rpn_box_reg: 0.0291 (0.0458) time: 1.8651 data: 0.0068 max mem: 3761
Epoch: [11] [50/148] eta: 0:03:01 lr: 0.000005 loss: 0.1277
(0.1591) loss_classifier: 0.0443 (0.0596) loss_box_reg: 0.0142
(0.0242) loss_objectness: 0.0261 (0.0310) loss_rpn_box_reg: 0.0303 (0.0443) time: 1.7674 data: 0.0070 max mem: 3761
Epoch: [11] [60/148] eta: 0:02:43 lr: 0.000005 loss: 0.1462
(0.1587) loss_classifier: 0.0549 (0.0598) loss_box_reg: 0.0202
(0.0250) loss_objectness: 0.0211 (0.0301) loss_rpn_box_reg: 0.0322 (0.0439) time: 1.8262 data: 0.0073 max mem: 3761
Epoch: [11] [70/148] eta: 0:02:23 lr: 0.000005 loss: 0.1462
(0.1644) loss_classifier: 0.0625 (0.0621) loss_box_reg: 0.0248
(0.0257) loss_objectness: 0.0211 (0.0322) loss_rpn_box_reg: 0.0400 (0.0443) time: 1.7811 data: 0.0087 max mem: 3761
Epoch: [11] [80/148] eta: 0:02:07 lr: 0.000005 loss: 0.1288
(0.1615) loss_classifier: 0.0571 (0.0608) loss_box_reg: 0.0169
(0.0246) loss_objectness: 0.0245 (0.0325) loss_rpn_box_reg: 0.0424 (0.0435) time: 1.9627 data: 0.0085 max mem: 3761
Epoch: [11] [90/148] eta: 0:01:49 lr: 0.000005 loss: 0.1096
(0.1567) loss_classifier: 0.0420 (0.0593) loss_box_reg: 0.0142
(0.0238) loss_objectness: 0.0214 (0.0310) loss_rpn_box_reg: 0.0333 (0.0427) time: 2.0586 data: 0.0063 max mem: 3761
Epoch: [11] [100/148] eta: 0:01:30 lr: 0.000005 loss: 0.1334
(0.1557) loss_classifier: 0.0504 (0.0593) loss_box_reg: 0.0196
(0.0237) loss_objectness: 0.0179 (0.0306) loss_rpn_box_reg: 0.03

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31 (0.0421) time: 1.9168 data: 0.0063 max mem: 3761
Epoch: [11] [110/148] eta: 0:01:12 lr: 0.000005 loss: 0.1325
(0.1535) loss_classifier: 0.0596 (0.0591) loss_box_reg: 0.0178
(0.0231) loss_objectness: 0.0186 (0.0299) loss_rpn_box_reg: 0.02
65 (0.0413) time: 1.9701 data: 0.0064 max mem: 3761
Epoch: [11] [120/148] eta: 0:00:53 lr: 0.000005 loss: 0.1150
(0.1508) loss_classifier: 0.0483 (0.0577) loss_box_reg: 0.0136
(0.0224) loss_objectness: 0.0243 (0.0301) loss_rpn_box_reg: 0.02
51 (0.0407) time: 1.9667 data: 0.0071 max mem: 3761
Epoch: [11] [130/148] eta: 0:00:34 lr: 0.000005 loss: 0.1267
(0.1543) loss_classifier: 0.0495 (0.0590) loss_box_reg: 0.0139
(0.0231) loss_objectness: 0.0288 (0.0312) loss_rpn_box_reg: 0.03
48 (0.0409) time: 1.8663 data: 0.0069 max mem: 3761
Epoch: [11] [140/148] eta: 0:00:15 lr: 0.000005 loss: 0.1180
(0.1534) loss_classifier: 0.0412 (0.0579) loss_box_reg: 0.0142
(0.0227) loss_objectness: 0.0250 (0.0315) loss_rpn_box_reg: 0.04
31 (0.0413) time: 1.8639 data: 0.0063 max mem: 3761
Epoch: [11] [147/148] eta: 0:00:01 lr: 0.000005 loss: 0.1110
(0.1527) loss_classifier: 0.0395 (0.0576) loss_box_reg: 0.0140
(0.0227) loss_objectness: 0.0213 (0.0313) loss_rpn_box_reg: 0.03
59 (0.0411) time: 1.8623 data: 0.0063 max mem: 3761
Epoch: [11] Total time: 0:04:40 (1.8958 s / it)
creating index...
index created!
Test: [ 0/34] eta: 0:00:32 model_time: 0.6992 (0.6992) evaluator_time: 0.0035 (0.0035) time: 0.9525 data: 0.2467 max mem: 3761
Test: [33/34] eta: 0:00:00 model_time: 0.6843 (0.6891) evaluator_time: 0.0039 (0.0035) time: 0.6993 data: 0.0052 max mem: 3761
Test: Total time: 0:00:24 (0.7094 s / it)
Averaged stats: model_time: 0.6843 (0.6891) evaluator_time: 0.0039 (0.0035)
Accumulating evaluation results...
DONE (t=0.06s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.435
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.537
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.506
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.606
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.444
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.571
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.843
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.843
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.813
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.847
creating index...
index created!
Test: [ 0/148] eta: 0:02:25 model_time: 0.7636 (0.7636) evalua
```

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tor_time: 0.0049 (0.0049)  time: 0.9858  data: 0.2150  max mem: 376
1
Test: [100/148]  eta: 0:00:39  model_time: 0.6983 (0.7992)  evalua
tor_time: 0.0031 (0.0032)  time: 0.8545  data: 0.0063  max mem: 376
1
Test: [147/148]  eta: 0:00:00  model_time: 0.6931 (0.7951)  evalua
tor_time: 0.0029 (0.0032)  time: 0.8366  data: 0.0070  max mem: 376
1
Test: Total time: 0:01:59 (0.8080 s / it)
Averaged stats: model_time: 0.6931 (0.7951)  evaluator_time: 0.0029
(0.0032)
Accumulating evaluation results...
DONE (t=0.11s).
IoU metric: bbox
Average Precision  (AP) @[ IoU=0.50:0.95 | area=  all | maxDets=1
00 ] = 0.237
Average Precision  (AP) @[ IoU=0.50      | area=  all | maxDets=1
00 ] = 0.328
Average Precision  (AP) @[ IoU=0.75      | area=  all | maxDets=1
00 ] = 0.253
Average Precision  (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision  (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.333
Average Precision  (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.239
Average Recall     (AR) @[ IoU=0.50:0.95 | area=  all | maxDets=
1 ] = 0.458
Average Recall     (AR) @[ IoU=0.50:0.95 | area=  all | maxDets=
10 ] = 0.579
Average Recall     (AR) @[ IoU=0.50:0.95 | area=  all | maxDets=1
00 ] = 0.579
Average Recall     (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall     (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.600
Average Recall     (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.578
Epoch: [12] [ 0/148]  eta: 0:07:04  lr: 0.000001  loss: 0.1276
(0.1276)  loss_classifier: 0.0450 (0.0450)  loss_box_reg: 0.0124
(0.0124)  loss_objectness: 0.0099 (0.0099)  loss_rpn_box_reg: 0.06
03 (0.0603)  time: 2.8712  data: 0.3150  max mem: 3761
Epoch: [12] [ 10/148] eta: 0:04:23  lr: 0.000001  loss: 0.1276
(0.1737)  loss_classifier: 0.0474 (0.0579)  loss_box_reg: 0.0127
(0.0231)  loss_objectness: 0.0150 (0.0470)  loss_rpn_box_reg: 0.03
72 (0.0456)  time: 1.9080  data: 0.0331  max mem: 3761
Epoch: [12] [ 20/148] eta: 0:04:08  lr: 0.000001  loss: 0.1158
(0.1606)  loss_classifier: 0.0474 (0.0556)  loss_box_reg: 0.0175
(0.0224)  loss_objectness: 0.0168 (0.0420)  loss_rpn_box_reg: 0.03
37 (0.0405)  time: 1.8968  data: 0.0046  max mem: 3761
Epoch: [12] [ 30/148] eta: 0:03:41  lr: 0.000001  loss: 0.1158
(0.1519)  loss_classifier: 0.0474 (0.0549)  loss_box_reg: 0.0151
(0.0211)  loss_objectness: 0.0176 (0.0368)  loss_rpn_box_reg: 0.03
37 (0.0391)  time: 1.8543  data: 0.0055  max mem: 3761
Epoch: [12] [ 40/148] eta: 0:03:20  lr: 0.000001  loss: 0.1574
(0.1509)  loss_classifier: 0.0566 (0.0563)  loss_box_reg: 0.0183
(0.0219)  loss_objectness: 0.0224 (0.0343)  loss_rpn_box_reg: 0.03
43 (0.0383)  time: 1.7639  data: 0.0065  max mem: 3761
Epoch: [12] [ 50/148] eta: 0:03:00  lr: 0.000001  loss: 0.1574
(0.1510)  loss_classifier: 0.0566 (0.0567)  loss_box_reg: 0.0189
(0.0224)  loss_objectness: 0.0238 (0.0333)  loss_rpn_box_reg: 0.03

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52 (0.0386) time: 1.8011 data: 0.0063 max mem: 3761
Epoch: [12] [ 60/148] eta: 0:02:47 lr: 0.000001 loss: 0.1302
(0.1462) loss_classifier: 0.0513 (0.0544) loss_box_reg: 0.0175
(0.0216) loss_objectness: 0.0184 (0.0311) loss_rpn_box_reg: 0.03
61 (0.0391) time: 1.9909 data: 0.0066 max mem: 3761
Epoch: [12] [ 70/148] eta: 0:02:29 lr: 0.000001 loss: 0.1180
(0.1461) loss_classifier: 0.0520 (0.0568) loss_box_reg: 0.0182
(0.0222) loss_objectness: 0.0131 (0.0289) loss_rpn_box_reg: 0.02
99 (0.0382) time: 2.0894 data: 0.0066 max mem: 3761
Epoch: [12] [ 80/148] eta: 0:02:08 lr: 0.000001 loss: 0.1455
(0.1500) loss_classifier: 0.0583 (0.0579) loss_box_reg: 0.0183
(0.0224) loss_objectness: 0.0167 (0.0300) loss_rpn_box_reg: 0.03
33 (0.0397) time: 1.8511 data: 0.0065 max mem: 3761
Epoch: [12] [ 90/148] eta: 0:01:47 lr: 0.000001 loss: 0.1368
(0.1505) loss_classifier: 0.0422 (0.0571) loss_box_reg: 0.0127
(0.0224) loss_objectness: 0.0288 (0.0305) loss_rpn_box_reg: 0.04
91 (0.0405) time: 1.6614 data: 0.0065 max mem: 3761
Epoch: [12] [100/148] eta: 0:01:28 lr: 0.000001 loss: 0.1491
(0.1529) loss_classifier: 0.0535 (0.0579) loss_box_reg: 0.0172
(0.0236) loss_objectness: 0.0304 (0.0302) loss_rpn_box_reg: 0.04
04 (0.0412) time: 1.6661 data: 0.0065 max mem: 3761
Epoch: [12] [110/148] eta: 0:01:11 lr: 0.000001 loss: 0.1536
(0.1528) loss_classifier: 0.0540 (0.0581) loss_box_reg: 0.0214
(0.0231) loss_objectness: 0.0265 (0.0299) loss_rpn_box_reg: 0.04
04 (0.0417) time: 1.9173 data: 0.0066 max mem: 3761
Epoch: [12] [120/148] eta: 0:00:52 lr: 0.000001 loss: 0.1395
(0.1531) loss_classifier: 0.0540 (0.0580) loss_box_reg: 0.0195
(0.0232) loss_objectness: 0.0265 (0.0301) loss_rpn_box_reg: 0.03
51 (0.0419) time: 1.9289 data: 0.0064 max mem: 3761
Epoch: [12] [130/148] eta: 0:00:33 lr: 0.000001 loss: 0.1395
(0.1536) loss_classifier: 0.0550 (0.0583) loss_box_reg: 0.0195
(0.0232) loss_objectness: 0.0205 (0.0305) loss_rpn_box_reg: 0.03
12 (0.0416) time: 1.7782 data: 0.0103 max mem: 3761
Epoch: [12] [140/148] eta: 0:00:14 lr: 0.000001 loss: 0.1137
(0.1510) loss_classifier: 0.0415 (0.0574) loss_box_reg: 0.0119
(0.0225) loss_objectness: 0.0153 (0.0301) loss_rpn_box_reg: 0.02
82 (0.0410) time: 1.7774 data: 0.0110 max mem: 3761
Epoch: [12] [147/148] eta: 0:00:01 lr: 0.000001 loss: 0.1342
(0.1522) loss_classifier: 0.0495 (0.0584) loss_box_reg: 0.0121
(0.0227) loss_objectness: 0.0213 (0.0302) loss_rpn_box_reg: 0.02
82 (0.0409) time: 1.8211 data: 0.0070 max mem: 3761
Epoch: [12] Total time: 0:04:33 (1.8495 s / it)
creating index...
index created!
Test: [ 0/34] eta: 0:00:32 model_time: 0.7036 (0.7036) evaluator_time: 0.0039 (0.0039) time: 0.9527 data: 0.2429 max mem: 3761
Test: [33/34] eta: 0:00:00 model_time: 0.6897 (0.6942) evaluator_time: 0.0038 (0.0036) time: 0.7061 data: 0.0056 max mem: 3761
Test: Total time: 0:00:24 (0.7135 s / it)
Averaged stats: model_time: 0.6897 (0.6942) evaluator_time: 0.0038 (0.0036)
Accumulating evaluation results...
DONE (t=0.05s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.435
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.537
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.507
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
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00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.606
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.445
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.571
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.843
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.843
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.813
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.847
creating index...
index created!
Test: [ 0/148] eta: 0:03:42 model_time: 1.1244 (1.1244) evalua
tor_time: 0.0059 (0.0059) time: 1.5019 data: 0.3688 max mem: 376
1
Test: [100/148] eta: 0:00:40 model_time: 0.6961 (0.8240) evalua
tor_time: 0.0030 (0.0032) time: 0.8058 data: 0.0059 max mem: 376
1
Test: [147/148] eta: 0:00:00 model_time: 0.6945 (0.7986) evalua
tor_time: 0.0028 (0.0032) time: 0.7438 data: 0.0058 max mem: 376
1
Test: Total time: 0:02:00 (0.8121 s / it)
Averaged stats: model_time: 0.6945 (0.7986) evaluator_time: 0.0028
(0.0032)
Accumulating evaluation results...
DONE (t=0.10s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.184
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.269
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.192
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.049
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.193
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.408
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.499
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.499
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.190
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.516
Epoch: [13] [ 0/148] eta: 0:04:41 lr: 0.000001 loss: 0.2024
(0.2024) loss_classifier: 0.0841 (0.0841) loss_box_reg: 0.0410
(0.0410) loss_objectness: 0.0225 (0.0225) loss_rpn_box_reg: 0.05

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49 (0.0549) time: 1.9011 data: 0.2482 max mem: 3761
Epoch: [13] [10/148] eta: 0:04:10 lr: 0.000001 loss: 0.1240
(0.1271) loss_classifier: 0.0513 (0.0507) loss_box_reg: 0.0213
(0.0200) loss_objectness: 0.0190 (0.0220) loss_rpn_box_reg: 0.03
28 (0.0344) time: 1.8162 data: 0.0298 max mem: 3761
Epoch: [13] [20/148] eta: 0:04:03 lr: 0.000001 loss: 0.1234
(0.1284) loss_classifier: 0.0513 (0.0557) loss_box_reg: 0.0171
(0.0204) loss_objectness: 0.0165 (0.0194) loss_rpn_box_reg: 0.02
66 (0.0328) time: 1.9045 data: 0.0058 max mem: 3761
Epoch: [13] [30/148] eta: 0:03:44 lr: 0.000001 loss: 0.1407
(0.1452) loss_classifier: 0.0516 (0.0576) loss_box_reg: 0.0171
(0.0214) loss_objectness: 0.0149 (0.0304) loss_rpn_box_reg: 0.03
16 (0.0358) time: 1.9545 data: 0.0049 max mem: 3761
Epoch: [13] [40/148] eta: 0:03:28 lr: 0.000001 loss: 0.1407
(0.1468) loss_classifier: 0.0548 (0.0575) loss_box_reg: 0.0201
(0.0221) loss_objectness: 0.0214 (0.0292) loss_rpn_box_reg: 0.04
06 (0.0380) time: 1.9556 data: 0.0063 max mem: 3761
Epoch: [13] [50/148] eta: 0:03:12 lr: 0.000001 loss: 0.1299
(0.1430) loss_classifier: 0.0526 (0.0560) loss_box_reg: 0.0192
(0.0221) loss_objectness: 0.0146 (0.0278) loss_rpn_box_reg: 0.03
62 (0.0371) time: 2.0485 data: 0.0064 max mem: 3761
Epoch: [13] [60/148] eta: 0:02:53 lr: 0.000001 loss: 0.1429
(0.1520) loss_classifier: 0.0523 (0.0581) loss_box_reg: 0.0198
(0.0234) loss_objectness: 0.0199 (0.0307) loss_rpn_box_reg: 0.03
15 (0.0398) time: 2.0511 data: 0.0066 max mem: 3761
Epoch: [13] [70/148] eta: 0:02:32 lr: 0.000001 loss: 0.1580
(0.1541) loss_classifier: 0.0569 (0.0575) loss_box_reg: 0.0215
(0.0234) loss_objectness: 0.0252 (0.0305) loss_rpn_box_reg: 0.04
44 (0.0427) time: 1.9600 data: 0.0064 max mem: 3761
Epoch: [13] [80/148] eta: 0:02:12 lr: 0.000001 loss: 0.1565
(0.1519) loss_classifier: 0.0399 (0.0557) loss_box_reg: 0.0108
(0.0222) loss_objectness: 0.0205 (0.0314) loss_rpn_box_reg: 0.04
09 (0.0426) time: 1.8608 data: 0.0062 max mem: 3761
Epoch: [13] [90/148] eta: 0:01:51 lr: 0.000001 loss: 0.1157
(0.1482) loss_classifier: 0.0412 (0.0551) loss_box_reg: 0.0130
(0.0219) loss_objectness: 0.0171 (0.0304) loss_rpn_box_reg: 0.02
99 (0.0408) time: 1.8120 data: 0.0065 max mem: 3761
Epoch: [13] [100/148] eta: 0:01:32 lr: 0.000001 loss: 0.1254
(0.1484) loss_classifier: 0.0479 (0.0551) loss_box_reg: 0.0180
(0.0218) loss_objectness: 0.0256 (0.0302) loss_rpn_box_reg: 0.02
95 (0.0413) time: 1.9136 data: 0.0067 max mem: 3761
Epoch: [13] [110/148] eta: 0:01:13 lr: 0.000001 loss: 0.1367
(0.1474) loss_classifier: 0.0506 (0.0548) loss_box_reg: 0.0190
(0.0221) loss_objectness: 0.0269 (0.0296) loss_rpn_box_reg: 0.03
46 (0.0409) time: 1.9116 data: 0.0065 max mem: 3761
Epoch: [13] [120/148] eta: 0:00:54 lr: 0.000001 loss: 0.1367
(0.1469) loss_classifier: 0.0543 (0.0552) loss_box_reg: 0.0160
(0.0221) loss_objectness: 0.0189 (0.0289) loss_rpn_box_reg: 0.03
45 (0.0407) time: 1.9551 data: 0.0071 max mem: 3761
Epoch: [13] [130/148] eta: 0:00:34 lr: 0.000001 loss: 0.1503
(0.1506) loss_classifier: 0.0545 (0.0558) loss_box_reg: 0.0154
(0.0223) loss_objectness: 0.0233 (0.0309) loss_rpn_box_reg: 0.03
50 (0.0416) time: 1.8718 data: 0.0074 max mem: 3761
Epoch: [13] [140/148] eta: 0:00:15 lr: 0.000001 loss: 0.1728
(0.1539) loss_classifier: 0.0545 (0.0568) loss_box_reg: 0.0183
(0.0229) loss_objectness: 0.0378 (0.0323) loss_rpn_box_reg: 0.04
56 (0.0419) time: 1.6836 data: 0.0064 max mem: 3761
Epoch: [13] [147/148] eta: 0:00:01 lr: 0.000001 loss: 0.1649
(0.1542) loss_classifier: 0.0548 (0.0578) loss_box_reg: 0.0207
(0.0229) loss_objectness: 0.0362 (0.0320) loss_rpn_box_reg: 0.03
89 (0.0414) time: 1.7725 data: 0.0063 max mem: 3761

```
Epoch: [13] Total time: 0:04:41 (1.9040 s / it)
creating index...
index created!
Test: [ 0/34] eta: 0:00:33 model_time: 0.7143 (0.7143) evaluator_time: 0.0050 (0.0050) time: 0.9887 data: 0.2672 max mem: 3761
Test: [33/34] eta: 0:00:00 model_time: 0.6928 (0.6978) evaluator_time: 0.0038 (0.0035) time: 0.7082 data: 0.0055 max mem: 3761
Test: Total time: 0:00:24 (0.7182 s / it)
Averaged stats: model_time: 0.6928 (0.6978) evaluator_time: 0.0038 (0.0035)
Accumulating evaluation results...
DONE (t=0.05s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.434
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.537
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.506
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.606
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.444
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.571
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.843
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.843
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.813
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.846
creating index...
index created!
Test: [ 0/148] eta: 0:02:44 model_time: 0.7657 (0.7657) evaluator_time: 0.0038 (0.0038) time: 1.1108 data: 0.3391 max mem: 3761
Test: [100/148] eta: 0:00:39 model_time: 0.6964 (0.7981) evaluator_time: 0.0031 (0.0052) time: 0.7657 data: 0.0059 max mem: 3761
Test: [147/148] eta: 0:00:00 model_time: 0.6998 (0.7946) evaluator_time: 0.0031 (0.0046) time: 0.7911 data: 0.0058 max mem: 3761
Test: Total time: 0:01:59 (0.8093 s / it)
Averaged stats: model_time: 0.6998 (0.7946) evaluator_time: 0.0031 (0.0046)
Accumulating evaluation results...
DONE (t=0.11s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.198
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.279
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.217
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
```

```
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.073
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.207
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.439
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.530
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.530
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.121
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.551
Epoch: [14] [ 0/148] eta: 0:04:33 lr: 0.000001 loss: 0.0810
(0.0810) loss_classifier: 0.0317 (0.0317) loss_box_reg: 0.0093
(0.0093) loss_objectness: 0.0140 (0.0140) loss_rpn_box_reg: 0.02
60 (0.0260) time: 1.8499 data: 0.2336 max mem: 3761
Epoch: [14] [ 10/148] eta: 0:04:22 lr: 0.000001 loss: 0.1106
(0.1220) loss_classifier: 0.0434 (0.0517) loss_box_reg: 0.0127
(0.0188) loss_objectness: 0.0112 (0.0170) loss_rpn_box_reg: 0.02
74 (0.0347) time: 1.9038 data: 0.0283 max mem: 3761
Epoch: [14] [ 20/148] eta: 0:03:48 lr: 0.000001 loss: 0.1345
(0.1437) loss_classifier: 0.0526 (0.0579) loss_box_reg: 0.0183
(0.0249) loss_objectness: 0.0116 (0.0247) loss_rpn_box_reg: 0.03
10 (0.0362) time: 1.7857 data: 0.0058 max mem: 3761
Epoch: [14] [ 30/148] eta: 0:03:28 lr: 0.000001 loss: 0.1471
(0.1562) loss_classifier: 0.0505 (0.0565) loss_box_reg: 0.0249
(0.0250) loss_objectness: 0.0220 (0.0333) loss_rpn_box_reg: 0.04
09 (0.0414) time: 1.6893 data: 0.0050 max mem: 3761
Epoch: [14] [ 40/148] eta: 0:03:13 lr: 0.000001 loss: 0.1471
(0.1589) loss_classifier: 0.0531 (0.0576) loss_box_reg: 0.0199
(0.0247) loss_objectness: 0.0222 (0.0337) loss_rpn_box_reg: 0.04
55 (0.0429) time: 1.7862 data: 0.0061 max mem: 3761
Epoch: [14] [ 50/148] eta: 0:02:55 lr: 0.000001 loss: 0.1495
(0.1580) loss_classifier: 0.0555 (0.0571) loss_box_reg: 0.0150
(0.0242) loss_objectness: 0.0211 (0.0326) loss_rpn_box_reg: 0.03
68 (0.0442) time: 1.8361 data: 0.0061 max mem: 3761
Epoch: [14] [ 60/148] eta: 0:02:36 lr: 0.000001 loss: 0.1470
(0.1609) loss_classifier: 0.0533 (0.0583) loss_box_reg: 0.0229
(0.0248) loss_objectness: 0.0236 (0.0339) loss_rpn_box_reg: 0.03
68 (0.0439) time: 1.7669 data: 0.0061 max mem: 3761
Epoch: [14] [ 70/148] eta: 0:02:21 lr: 0.000001 loss: 0.1311
(0.1559) loss_classifier: 0.0458 (0.0564) loss_box_reg: 0.0141
(0.0237) loss_objectness: 0.0232 (0.0325) loss_rpn_box_reg: 0.03
64 (0.0433) time: 1.8614 data: 0.0060 max mem: 3761
Epoch: [14] [ 80/148] eta: 0:02:04 lr: 0.000001 loss: 0.1267
(0.1553) loss_classifier: 0.0515 (0.0579) loss_box_reg: 0.0141
(0.0241) loss_objectness: 0.0144 (0.0309) loss_rpn_box_reg: 0.03
30 (0.0423) time: 2.0076 data: 0.0061 max mem: 3761
Epoch: [14] [ 90/148] eta: 0:01:46 lr: 0.000001 loss: 0.1467
(0.1548) loss_classifier: 0.0592 (0.0583) loss_box_reg: 0.0189
(0.0236) loss_objectness: 0.0195 (0.0305) loss_rpn_box_reg: 0.03
30 (0.0425) time: 1.9233 data: 0.0062 max mem: 3761
Epoch: [14] [100/148] eta: 0:01:28 lr: 0.000001 loss: 0.1438
(0.1531) loss_classifier: 0.0517 (0.0579) loss_box_reg: 0.0181
(0.0232) loss_objectness: 0.0195 (0.0302) loss_rpn_box_reg: 0.03
44 (0.0418) time: 1.8729 data: 0.0062 max mem: 3761
```

Epoch: [14] [110/148] eta: 0:01:10 lr: 0.000001 loss: 0.1169
 (0.1504) loss_classifier: 0.0458 (0.0571) loss_box_reg: 0.0153
 (0.0224) loss_objectness: 0.0137 (0.0296) loss_rpn_box_reg: 0.02
 98 (0.0414) time: 1.9095 data: 0.0061 max mem: 3761
 Epoch: [14] [120/148] eta: 0:00:52 lr: 0.000001 loss: 0.1251
 (0.1505) loss_classifier: 0.0458 (0.0569) loss_box_reg: 0.0171
 (0.0228) loss_objectness: 0.0192 (0.0292) loss_rpn_box_reg: 0.02
 99 (0.0416) time: 1.9585 data: 0.0062 max mem: 3761
 Epoch: [14] [130/148] eta: 0:00:33 lr: 0.000001 loss: 0.1298
 (0.1513) loss_classifier: 0.0513 (0.0572) loss_box_reg: 0.0203
 (0.0233) loss_objectness: 0.0218 (0.0296) loss_rpn_box_reg: 0.03
 42 (0.0412) time: 1.9113 data: 0.0062 max mem: 3761
 Epoch: [14] [140/148] eta: 0:00:14 lr: 0.000001 loss: 0.1276
 (0.1516) loss_classifier: 0.0513 (0.0574) loss_box_reg: 0.0151
 (0.0231) loss_objectness: 0.0298 (0.0307) loss_rpn_box_reg: 0.03
 12 (0.0405) time: 1.7796 data: 0.0060 max mem: 3761
 Epoch: [14] [147/148] eta: 0:00:01 lr: 0.000001 loss: 0.1383
 (0.1517) loss_classifier: 0.0503 (0.0574) loss_box_reg: 0.0151
 (0.0232) loss_objectness: 0.0205 (0.0306) loss_rpn_box_reg: 0.03
 14 (0.0405) time: 1.7784 data: 0.0061 max mem: 3761
 Epoch: [14] Total time: 0:04:33 (1.8472 s / it)

creating index...

index created!

Test: [0/34] eta: 0:00:32 model_time: 0.7056 (0.7056) evaluator_time: 0.0059 (0.0059) time: 0.9677 data: 0.2538 max mem: 3761
 Test: [33/34] eta: 0:00:00 model_time: 0.6941 (0.6978) evaluator_time: 0.0038 (0.0035) time: 0.7095 data: 0.0061 max mem: 3761
 Test: Total time: 0:00:24 (0.7174 s / it)

Averaged stats: model_time: 0.6941 (0.6978) evaluator_time: 0.0038 (0.0035)

Accumulating evaluation results...

DONE (t=0.06s).

IoU metric: bbox

Average Precision	(AP) @[IoU=0.50:0.95 area=	all maxDets=1
00]	= 0.435	
Average Precision	(AP) @[IoU=0.50 area=	all maxDets=1
00]	= 0.537	
Average Precision	(AP) @[IoU=0.75 area=	all maxDets=1
00]	= 0.506	
Average Precision	(AP) @[IoU=0.50:0.95 area=	small maxDets=1
00]	= -1.000	
Average Precision	(AP) @[IoU=0.50:0.95 area=	medium maxDets=1
00]	= 0.606	
Average Precision	(AP) @[IoU=0.50:0.95 area=	large maxDets=1
00]	= 0.444	
Average Recall	(AR) @[IoU=0.50:0.95 area=	all maxDets=
1]	= 0.571	
Average Recall	(AR) @[IoU=0.50:0.95 area=	all maxDets=
10]	= 0.843	
Average Recall	(AR) @[IoU=0.50:0.95 area=	all maxDets=1
00]	= 0.843	
Average Recall	(AR) @[IoU=0.50:0.95 area=	small maxDets=1
00]	= -1.000	
Average Recall	(AR) @[IoU=0.50:0.95 area=	medium maxDets=1
00]	= 0.813	
Average Recall	(AR) @[IoU=0.50:0.95 area=	large maxDets=1
00]	= 0.846	

creating index...

index created!

Test: [0/148] eta: 0:02:39 model_time: 0.7743 (0.7743) evaluator_time: 0.0040 (0.0040) time: 1.0789 data: 0.2982 max mem: 376

1

Test: [100/148] eta: 0:00:38 model_time: 0.7037 (0.7928) evaluator_time: 0.0032 (0.0032) time: 0.8478 data: 0.0063 max mem: 376

1

Test: [147/148] eta: 0:00:00 model_time: 0.6948 (0.7938) evaluator_time: 0.0029 (0.0032) time: 0.7819 data: 0.0068 max mem: 376

1

Test: Total time: 0:01:59 (0.8070 s / it)

Averaged stats: model_time: 0.6948 (0.7938) evaluator_time: 0.0029 (0.0032)

Accumulating evaluation results...

DONE (t=0.10s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.167

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.239

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.176

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.186

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.170

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.394

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.503

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.503

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.406

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.509

Epoch: [15] [0/148] eta: 0:04:38 lr: 0.000000 loss: 0.1811 (0.1811) loss_classifier: 0.0692 (0.0692) loss_box_reg: 0.0185 (0.0185) loss_objectness: 0.0520 (0.0520) loss_rpn_box_reg: 0.0413 (0.0413) time: 1.8787 data: 0.2546 max mem: 3761

Epoch: [15] [10/148] eta: 0:04:23 lr: 0.000000 loss: 0.1539 (0.1576) loss_classifier: 0.0602 (0.0605) loss_box_reg: 0.0187 (0.0250) loss_objectness: 0.0252 (0.0275) loss_rpn_box_reg: 0.0409 (0.0446) time: 1.9082 data: 0.0306 max mem: 3761

Epoch: [15] [20/148] eta: 0:04:15 lr: 0.000000 loss: 0.1403 (0.1458) loss_classifier: 0.0602 (0.0616) loss_box_reg: 0.0164 (0.0210) loss_objectness: 0.0160 (0.0241) loss_rpn_box_reg: 0.0336 (0.0392) time: 2.0034 data: 0.0061 max mem: 3761

Epoch: [15] [30/148] eta: 0:03:48 lr: 0.000000 loss: 0.1335 (0.1413) loss_classifier: 0.0569 (0.0591) loss_box_reg: 0.0159 (0.0199) loss_objectness: 0.0193 (0.0237) loss_rpn_box_reg: 0.0305 (0.0386) time: 1.9533 data: 0.0050 max mem: 3761

Epoch: [15] [40/148] eta: 0:03:28 lr: 0.000000 loss: 0.1383 (0.1432) loss_classifier: 0.0532 (0.0574) loss_box_reg: 0.0171 (0.0213) loss_objectness: 0.0219 (0.0234) loss_rpn_box_reg: 0.0356 (0.0411) time: 1.8592 data: 0.0060 max mem: 3761

Epoch: [15] [50/148] eta: 0:03:07 lr: 0.000000 loss: 0.1380 (0.1423) loss_classifier: 0.0626 (0.0586) loss_box_reg: 0.0153 (0.0222) loss_objectness: 0.0185 (0.0221) loss_rpn_box_reg: 0.0339 (0.0394) time: 1.8807 data: 0.0061 max mem: 3761

```
Epoch: [15] [ 60/148] eta: 0:02:45 lr: 0.000000 loss: 0.1371
(0.1455) loss_classifier: 0.0560 (0.0575) loss_box_reg: 0.0195
(0.0233) loss_objectness: 0.0185 (0.0249) loss_rpn_box_reg: 0.03
00 (0.0398) time: 1.7864 data: 0.0062 max mem: 3761
Epoch: [15] [ 70/148] eta: 0:02:26 lr: 0.000000 loss: 0.1317
(0.1432) loss_classifier: 0.0471 (0.0569) loss_box_reg: 0.0147
(0.0224) loss_objectness: 0.0238 (0.0248) loss_rpn_box_reg: 0.02
85 (0.0390) time: 1.7675 data: 0.0062 max mem: 3761
Epoch: [15] [ 80/148] eta: 0:02:06 lr: 0.000000 loss: 0.1208
(0.1425) loss_classifier: 0.0418 (0.0556) loss_box_reg: 0.0114
(0.0217) loss_objectness: 0.0183 (0.0253) loss_rpn_box_reg: 0.02
41 (0.0399) time: 1.8134 data: 0.0061 max mem: 3761
Epoch: [15] [ 90/148] eta: 0:01:49 lr: 0.000000 loss: 0.1340
(0.1419) loss_classifier: 0.0475 (0.0555) loss_box_reg: 0.0118
(0.0213) loss_objectness: 0.0183 (0.0258) loss_rpn_box_reg: 0.03
45 (0.0392) time: 1.9086 data: 0.0060 max mem: 3761
Epoch: [15] [100/148] eta: 0:01:30 lr: 0.000000 loss: 0.1345
(0.1415) loss_classifier: 0.0505 (0.0547) loss_box_reg: 0.0169
(0.0213) loss_objectness: 0.0192 (0.0260) loss_rpn_box_reg: 0.03
54 (0.0395) time: 1.9590 data: 0.0062 max mem: 3761
Epoch: [15] [110/148] eta: 0:01:11 lr: 0.000000 loss: 0.1345
(0.1443) loss_classifier: 0.0505 (0.0550) loss_box_reg: 0.0167
(0.0216) loss_objectness: 0.0280 (0.0276) loss_rpn_box_reg: 0.03
94 (0.0402) time: 1.9100 data: 0.0062 max mem: 3761
Epoch: [15] [120/148] eta: 0:00:53 lr: 0.000000 loss: 0.1568
(0.1451) loss_classifier: 0.0580 (0.0553) loss_box_reg: 0.0167
(0.0214) loss_objectness: 0.0280 (0.0278) loss_rpn_box_reg: 0.04
65 (0.0406) time: 1.9599 data: 0.0061 max mem: 3761
Epoch: [15] [130/148] eta: 0:00:33 lr: 0.000000 loss: 0.1363
(0.1448) loss_classifier: 0.0593 (0.0555) loss_box_reg: 0.0198
(0.0215) loss_objectness: 0.0220 (0.0272) loss_rpn_box_reg: 0.03
61 (0.0406) time: 1.8673 data: 0.0062 max mem: 3761
Epoch: [15] [140/148] eta: 0:00:15 lr: 0.000000 loss: 0.1445
(0.1488) loss_classifier: 0.0634 (0.0569) loss_box_reg: 0.0244
(0.0222) loss_objectness: 0.0146 (0.0281) loss_rpn_box_reg: 0.04
17 (0.0416) time: 1.8665 data: 0.0064 max mem: 3761
Epoch: [15] [147/148] eta: 0:00:01 lr: 0.000000 loss: 0.1697
(0.1510) loss_classifier: 0.0634 (0.0574) loss_box_reg: 0.0229
(0.0227) loss_objectness: 0.0198 (0.0293) loss_rpn_box_reg: 0.04
76 (0.0416) time: 1.9158 data: 0.0064 max mem: 3761
Epoch: [15] Total time: 0:04:40 (1.8937 s / it)
creating index...
index created!
Test: [ 0/34] eta: 0:00:32 model_time: 0.7055 (0.7055) evaluator_time: 0.0033 (0.0033) time: 0.9580 data: 0.2464 max mem: 3761
Test: [33/34] eta: 0:00:00 model_time: 0.6925 (0.6962) evaluator_time: 0.0040 (0.0035) time: 0.7078 data: 0.0056 max mem: 3761
Test: Total time: 0:00:24 (0.7156 s / it)
Averaged stats: model_time: 0.6925 (0.6962) evaluator_time: 0.0040 (0.0035)
Accumulating evaluation results...
DONE (t=0.06s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.435
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.537
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.506
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
```



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Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.606
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.444
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.571
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.843
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.843
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.813
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.846
creating index...
index created!
Test: [ 0/148] eta: 0:02:36 model_time: 0.7848 (0.7848) evalua
tor_time: 0.0076 (0.0076) time: 1.0571 data: 0.2625 max mem: 376
1
Test: [100/148] eta: 0:00:38 model_time: 0.6983 (0.7944) evalua
tor_time: 0.0032 (0.0032) time: 0.8406 data: 0.0058 max mem: 376
1
Test: [147/148] eta: 0:00:00 model_time: 0.7047 (0.7954) evalua
tor_time: 0.0031 (0.0033) time: 0.8693 data: 0.0059 max mem: 376
1
Test: Total time: 0:01:59 (0.8084 s / it)
Averaged stats: model_time: 0.7047 (0.7954) evaluator_time: 0.0031
(0.0033)
Accumulating evaluation results...
DONE (t=0.11s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.192
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.269
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.211
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.317
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.191
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.424
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.532
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.532
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.638
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.527
Epoch: [16] [ 0/148] eta: 0:04:54 lr: 0.000000 loss: 0.2901
(0.2901) loss_classifier: 0.1031 (0.1031) loss_box_reg: 0.0742
(0.0742) loss_objectness: 0.0331 (0.0331) loss_rpn_box_reg: 0.07
97 (0.0797) time: 1.9931 data: 0.3658 max mem: 3761

```

Epoch: [16] [10/148] eta: 0:04:59 lr: 0.000000 loss: 0.1529
(0.1759) loss_classifier: 0.0670 (0.0691) loss_box_reg: 0.0225
(0.0305) loss_objectness: 0.0185 (0.0349) loss_rpn_box_reg: 0.03
98 (0.0414) time: 2.1728 data: 0.0383 max mem: 3761
Epoch: [16] [20/148] eta: 0:04:10 lr: 0.000000 loss: 0.1751
(0.1915) loss_classifier: 0.0670 (0.0713) loss_box_reg: 0.0230
(0.0318) loss_objectness: 0.0297 (0.0420) loss_rpn_box_reg: 0.03
98 (0.0464) time: 1.9516 data: 0.0048 max mem: 3761
Epoch: [16] [30/148] eta: 0:03:45 lr: 0.000000 loss: 0.1807
(0.1846) loss_classifier: 0.0607 (0.0687) loss_box_reg: 0.0200
(0.0276) loss_objectness: 0.0357 (0.0401) loss_rpn_box_reg: 0.04
16 (0.0482) time: 1.7627 data: 0.0051 max mem: 3761
Epoch: [16] [40/148] eta: 0:03:21 lr: 0.000000 loss: 0.1463
(0.1735) loss_classifier: 0.0529 (0.0657) loss_box_reg: 0.0189
(0.0267) loss_objectness: 0.0220 (0.0366) loss_rpn_box_reg: 0.03
52 (0.0444) time: 1.7737 data: 0.0062 max mem: 3761
Epoch: [16] [50/148] eta: 0:02:59 lr: 0.000000 loss: 0.1457
(0.1701) loss_classifier: 0.0529 (0.0647) loss_box_reg: 0.0192
(0.0262) loss_objectness: 0.0220 (0.0365) loss_rpn_box_reg: 0.03
09 (0.0426) time: 1.7259 data: 0.0061 max mem: 3761
Epoch: [16] [60/148] eta: 0:02:40 lr: 0.000000 loss: 0.1575
(0.1708) loss_classifier: 0.0598 (0.0648) loss_box_reg: 0.0192
(0.0263) loss_objectness: 0.0275 (0.0368) loss_rpn_box_reg: 0.03
53 (0.0428) time: 1.7302 data: 0.0060 max mem: 3761
Epoch: [16] [70/148] eta: 0:02:23 lr: 0.000000 loss: 0.1487
(0.1687) loss_classifier: 0.0636 (0.0644) loss_box_reg: 0.0160
(0.0250) loss_objectness: 0.0275 (0.0373) loss_rpn_box_reg: 0.03
53 (0.0420) time: 1.8294 data: 0.0061 max mem: 3761
Epoch: [16] [80/148] eta: 0:02:05 lr: 0.000000 loss: 0.1174
(0.1647) loss_classifier: 0.0567 (0.0633) loss_box_reg: 0.0148
(0.0250) loss_objectness: 0.0158 (0.0356) loss_rpn_box_reg: 0.03
13 (0.0409) time: 1.9227 data: 0.0061 max mem: 3761
Epoch: [16] [90/148] eta: 0:01:49 lr: 0.000000 loss: 0.1172
(0.1630) loss_classifier: 0.0469 (0.0627) loss_box_reg: 0.0129
(0.0249) loss_objectness: 0.0158 (0.0341) loss_rpn_box_reg: 0.03
62 (0.0413) time: 2.0631 data: 0.0063 max mem: 3761
Epoch: [16] [100/148] eta: 0:01:30 lr: 0.000000 loss: 0.1474
(0.1616) loss_classifier: 0.0564 (0.0624) loss_box_reg: 0.0158
(0.0248) loss_objectness: 0.0206 (0.0334) loss_rpn_box_reg: 0.03
62 (0.0410) time: 2.0041 data: 0.0062 max mem: 3761
Epoch: [16] [110/148] eta: 0:01:11 lr: 0.000000 loss: 0.1474
(0.1606) loss_classifier: 0.0469 (0.0608) loss_box_reg: 0.0161
(0.0244) loss_objectness: 0.0240 (0.0335) loss_rpn_box_reg: 0.03
56 (0.0419) time: 1.8122 data: 0.0064 max mem: 3761
Epoch: [16] [120/148] eta: 0:00:52 lr: 0.000000 loss: 0.1185
(0.1559) loss_classifier: 0.0432 (0.0596) loss_box_reg: 0.0135
(0.0235) loss_objectness: 0.0183 (0.0322) loss_rpn_box_reg: 0.03
18 (0.0406) time: 1.8597 data: 0.0064 max mem: 3761
Epoch: [16] [130/148] eta: 0:00:33 lr: 0.000000 loss: 0.1144
(0.1544) loss_classifier: 0.0432 (0.0585) loss_box_reg: 0.0123
(0.0231) loss_objectness: 0.0178 (0.0317) loss_rpn_box_reg: 0.03
18 (0.0412) time: 1.8614 data: 0.0062 max mem: 3761
Epoch: [16] [140/148] eta: 0:00:15 lr: 0.000000 loss: 0.1358
(0.1559) loss_classifier: 0.0433 (0.0586) loss_box_reg: 0.0170
(0.0233) loss_objectness: 0.0258 (0.0325) loss_rpn_box_reg: 0.04
38 (0.0415) time: 1.9098 data: 0.0064 max mem: 3761
Epoch: [16] [147/148] eta: 0:00:01 lr: 0.000000 loss: 0.1347
(0.1541) loss_classifier: 0.0405 (0.0581) loss_box_reg: 0.0180
(0.0233) loss_objectness: 0.0248 (0.0318) loss_rpn_box_reg: 0.03
41 (0.0409) time: 1.8721 data: 0.0063 max mem: 3761
Epoch: [16] Total time: 0:04:36 (1.8693 s / it)

creating index...

index created!

Test: [0/34] eta: 0:00:33 model_time: 0.7065 (0.7065) evaluator_time: 0.0055 (0.0055) time: 0.9722 data: 0.2578 max mem: 3761
 Test: [33/34] eta: 0:00:00 model_time: 0.6935 (0.6977) evaluator_time: 0.0039 (0.0036) time: 0.7094 data: 0.0057 max mem: 3761

Test: Total time: 0:00:24 (0.7177 s / it)

Averaged stats: model_time: 0.6935 (0.6977) evaluator_time: 0.0039 (0.0036)

Accumulating evaluation results...

DONE (t=0.06s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.435

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.537

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.506

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.606

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.444

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.571

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.843

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.843

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.813

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.846

creating index...

index created!

Test: [0/148] eta: 0:03:41 model_time: 1.1589 (1.1589) evaluator_time: 0.0045 (0.0045) time: 1.4968 data: 0.3305 max mem: 3761

Test: [100/148] eta: 0:00:39 model_time: 0.6927 (0.7977) evaluator_time: 0.0031 (0.0050) time: 0.7473 data: 0.0060 max mem: 3761

Test: [147/148] eta: 0:00:00 model_time: 0.7013 (0.7940) evaluator_time: 0.0026 (0.0044) time: 0.8392 data: 0.0058 max mem: 3761

Test: Total time: 0:01:59 (0.8086 s / it)

Averaged stats: model_time: 0.7013 (0.7940) evaluator_time: 0.0026 (0.0044)

Accumulating evaluation results...

DONE (t=0.10s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.175

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.246

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.186

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.135
Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.180
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=1] = 0.399
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.482
Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.482
Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000
Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.349
Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.489
Epoch: [17] [0/148] eta: 0:04:49 lr: 0.000000 loss: 0.3072
(0.3072) loss_classifier: 0.0778 (0.0778) loss_box_reg: 0.0288
(0.0288) loss_objectness: 0.1396 (0.1396) loss_rpn_box_reg: 0.0610 (0.0610) time: 1.9540 data: 0.3086 max mem: 3761
Epoch: [17] [10/148] eta: 0:04:11 lr: 0.000000 loss: 0.1337
(0.1498) loss_classifier: 0.0500 (0.0587) loss_box_reg: 0.0168
(0.0223) loss_objectness: 0.0208 (0.0315) loss_rpn_box_reg: 0.0397 (0.0373) time: 1.8220 data: 0.0329 max mem: 3761
Epoch: [17] [20/148] eta: 0:04:09 lr: 0.000000 loss: 0.1144
(0.1492) loss_classifier: 0.0500 (0.0600) loss_box_reg: 0.0167
(0.0237) loss_objectness: 0.0148 (0.0312) loss_rpn_box_reg: 0.0315 (0.0342) time: 1.9511 data: 0.0055 max mem: 3761
Epoch: [17] [30/148] eta: 0:03:56 lr: 0.000000 loss: 0.1144
(0.1473) loss_classifier: 0.0504 (0.0609) loss_box_reg: 0.0158
(0.0223) loss_objectness: 0.0161 (0.0286) loss_rpn_box_reg: 0.0344 (0.0354) time: 2.1062 data: 0.0059 max mem: 3761
Epoch: [17] [40/148] eta: 0:03:33 lr: 0.000000 loss: 0.1245
(0.1473) loss_classifier: 0.0473 (0.0596) loss_box_reg: 0.0192
(0.0239) loss_objectness: 0.0215 (0.0284) loss_rpn_box_reg: 0.0351 (0.0354) time: 2.0102 data: 0.0061 max mem: 3761
Epoch: [17] [50/148] eta: 0:03:10 lr: 0.000000 loss: 0.1318
(0.1459) loss_classifier: 0.0475 (0.0593) loss_box_reg: 0.0192
(0.0234) loss_objectness: 0.0214 (0.0279) loss_rpn_box_reg: 0.0293 (0.0352) time: 1.8562 data: 0.0060 max mem: 3761
Epoch: [17] [60/148] eta: 0:02:49 lr: 0.000000 loss: 0.1318
(0.1458) loss_classifier: 0.0566 (0.0590) loss_box_reg: 0.0175
(0.0229) loss_objectness: 0.0248 (0.0277) loss_rpn_box_reg: 0.0369 (0.0362) time: 1.8119 data: 0.0060 max mem: 3761
Epoch: [17] [70/148] eta: 0:02:28 lr: 0.000000 loss: 0.1244
(0.1457) loss_classifier: 0.0609 (0.0596) loss_box_reg: 0.0178
(0.0230) loss_objectness: 0.0219 (0.0271) loss_rpn_box_reg: 0.0339 (0.0360) time: 1.8165 data: 0.0062 max mem: 3761
Epoch: [17] [80/148] eta: 0:02:07 lr: 0.000000 loss: 0.1413
(0.1483) loss_classifier: 0.0593 (0.0591) loss_box_reg: 0.0200
(0.0227) loss_objectness: 0.0219 (0.0279) loss_rpn_box_reg: 0.0369 (0.0386) time: 1.7212 data: 0.0063 max mem: 3761
Epoch: [17] [90/148] eta: 0:01:47 lr: 0.000000 loss: 0.1612
(0.1502) loss_classifier: 0.0519 (0.0581) loss_box_reg: 0.0171
(0.0231) loss_objectness: 0.0367 (0.0294) loss_rpn_box_reg: 0.0453 (0.0397) time: 1.6216 data: 0.0060 max mem: 3761
Epoch: [17] [100/148] eta: 0:01:28 lr: 0.000000 loss: 0.1751
(0.1528) loss_classifier: 0.0533 (0.0598) loss_box_reg: 0.0265
(0.0235) loss_objectness: 0.0376 (0.0295) loss_rpn_box_reg: 0.0450 (0.0400) time: 1.7666 data: 0.0061 max mem: 3761
Epoch: [17] [110/148] eta: 0:01:11 lr: 0.000000 loss: 0.1580

```

(0.1503) loss_classifier: 0.0664 (0.0597) loss_box_reg: 0.0189
(0.0232) loss_objectness: 0.0171 (0.0284) loss_rpn_box_reg: 0.02
60 (0.0391) time: 1.9696 data: 0.0062 max mem: 3761
Epoch: [17] [120/148] eta: 0:00:52 lr: 0.000000 loss: 0.1287
(0.1508) loss_classifier: 0.0527 (0.0589) loss_box_reg: 0.0189
(0.0233) loss_objectness: 0.0147 (0.0285) loss_rpn_box_reg: 0.03
37 (0.0401) time: 1.9197 data: 0.0061 max mem: 3761
Epoch: [17] [130/148] eta: 0:00:34 lr: 0.000000 loss: 0.1331
(0.1521) loss_classifier: 0.0513 (0.0587) loss_box_reg: 0.0227
(0.0235) loss_objectness: 0.0170 (0.0294) loss_rpn_box_reg: 0.04
27 (0.0404) time: 2.0067 data: 0.0063 max mem: 3761
Epoch: [17] [140/148] eta: 0:00:15 lr: 0.000000 loss: 0.1331
(0.1533) loss_classifier: 0.0422 (0.0585) loss_box_reg: 0.0132
(0.0232) loss_objectness: 0.0172 (0.0306) loss_rpn_box_reg: 0.03
30 (0.0411) time: 1.9588 data: 0.0063 max mem: 3761
Epoch: [17] [147/148] eta: 0:00:01 lr: 0.000000 loss: 0.1242
(0.1522) loss_classifier: 0.0443 (0.0580) loss_box_reg: 0.0114
(0.0230) loss_objectness: 0.0237 (0.0302) loss_rpn_box_reg: 0.03
48 (0.0410) time: 1.8237 data: 0.0061 max mem: 3761
Epoch: [17] Total time: 0:04:38 (1.8802 s / it)

```

creating index...

index created!

```

Test: [ 0/34] eta: 0:00:33 model_time: 0.7191 (0.7191) evaluator_time: 0.0031 (0.0031) time: 0.9865 data: 0.2611 max mem: 3761
Test: [33/34] eta: 0:00:00 model_time: 0.6944 (0.6990) evaluator_time: 0.0038 (0.0035) time: 0.7107 data: 0.0057 max mem: 3761
Test: Total time: 0:00:24 (0.7187 s / it)
Averaged stats: model_time: 0.6944 (0.6990) evaluator_time: 0.0038 (0.0035)

```

Accumulating evaluation results...

DONE (t=0.05s).

IoU metric: bbox

```

Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.435
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.537
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.506
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.606
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.444
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1 ] = 0.571
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=10 ] = 0.843
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.843
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = 0.813
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=100 ] = 0.846

```

creating index...

index created!

```

Test: [ 0/148] eta: 0:02:37 model_time: 0.7833 (0.7833) evaluator_time: 0.0057 (0.0057) time: 1.0631 data: 0.2720 max mem: 3761
1

```

```

Test: [100/148] eta: 0:00:38 model_time: 0.6987 (0.7866) evalua
tor_time: 0.0031 (0.0032) time: 0.7707 data: 0.0059 max mem: 376
1
Test: [147/148] eta: 0:00:00 model_time: 0.6966 (0.7854) evalua
tor_time: 0.0027 (0.0032) time: 0.8026 data: 0.0061 max mem: 376
1
Test: Total time: 0:01:58 (0.7985 s / it)
Averaged stats: model_time: 0.6966 (0.7854) evaluator_time: 0.0027
(0.0032)
Accumulating evaluation results...
DONE (t=0.11s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.180
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.267
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.188
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.272
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.180
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.412
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.512
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.512
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.522
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.512
Epoch: [18] [ 0/148] eta: 0:07:17 lr: 0.000000 loss: 0.1483
(0.1483) loss_classifier: 0.0780 (0.0780) loss_box_reg: 0.0245
(0.0245) loss_objectness: 0.0137 (0.0137) loss_rpn_box_reg: 0.03
21 (0.0321) time: 2.9565 data: 0.3549 max mem: 3761
Epoch: [18] [ 10/148] eta: 0:04:36 lr: 0.000000 loss: 0.1386
(0.1404) loss_classifier: 0.0718 (0.0621) loss_box_reg: 0.0241
(0.0239) loss_objectness: 0.0161 (0.0215) loss_rpn_box_reg: 0.03
21 (0.0329) time: 2.0038 data: 0.0367 max mem: 3761
Epoch: [18] [ 20/148] eta: 0:04:04 lr: 0.000000 loss: 0.1285
(0.1407) loss_classifier: 0.0548 (0.0561) loss_box_reg: 0.0180
(0.0244) loss_objectness: 0.0161 (0.0220) loss_rpn_box_reg: 0.03
30 (0.0382) time: 1.8572 data: 0.0042 max mem: 3761
Epoch: [18] [ 30/148] eta: 0:03:45 lr: 0.000000 loss: 0.1395
(0.1478) loss_classifier: 0.0548 (0.0565) loss_box_reg: 0.0152
(0.0246) loss_objectness: 0.0172 (0.0279) loss_rpn_box_reg: 0.03
42 (0.0388) time: 1.8571 data: 0.0049 max mem: 3761
Epoch: [18] [ 40/148] eta: 0:03:18 lr: 0.000000 loss: 0.1623
(0.1615) loss_classifier: 0.0599 (0.0579) loss_box_reg: 0.0201
(0.0257) loss_objectness: 0.0267 (0.0352) loss_rpn_box_reg: 0.03
83 (0.0427) time: 1.7662 data: 0.0060 max mem: 3761
Epoch: [18] [ 50/148] eta: 0:03:07 lr: 0.000000 loss: 0.1229
(0.1528) loss_classifier: 0.0585 (0.0580) loss_box_reg: 0.0137
(0.0235) loss_objectness: 0.0267 (0.0315) loss_rpn_box_reg: 0.02
49 (0.0397) time: 1.9105 data: 0.0061 max mem: 3761
Epoch: [18] [ 60/148] eta: 0:02:48 lr: 0.000000 loss: 0.1024

```

```
(0.1483) loss_classifier: 0.0545 (0.0573) loss_box_reg: 0.0111
(0.0225) loss_objectness: 0.0099 (0.0296) loss_rpn_box_reg: 0.02
32 (0.0388) time: 2.0626 data: 0.0063 max mem: 3761
Epoch: [18] [ 70/148] eta: 0:02:32 lr: 0.000000 loss: 0.1096
(0.1452) loss_classifier: 0.0463 (0.0573) loss_box_reg: 0.0131
(0.0217) loss_objectness: 0.0149 (0.0279) loss_rpn_box_reg: 0.03
13 (0.0383) time: 2.0629 data: 0.0063 max mem: 3761
Epoch: [18] [ 80/148] eta: 0:02:12 lr: 0.000000 loss: 0.1208
(0.1437) loss_classifier: 0.0522 (0.0566) loss_box_reg: 0.0131
(0.0212) loss_objectness: 0.0170 (0.0274) loss_rpn_box_reg: 0.03
13 (0.0385) time: 2.0565 data: 0.0063 max mem: 3761
Epoch: [18] [ 90/148] eta: 0:01:52 lr: 0.000000 loss: 0.1286
(0.1444) loss_classifier: 0.0573 (0.0566) loss_box_reg: 0.0168
(0.0214) loss_objectness: 0.0243 (0.0274) loss_rpn_box_reg: 0.03
13 (0.0390) time: 1.8658 data: 0.0065 max mem: 3761
Epoch: [18] [100/148] eta: 0:01:32 lr: 0.000000 loss: 0.1461
(0.1475) loss_classifier: 0.0538 (0.0571) loss_box_reg: 0.0176
(0.0218) loss_objectness: 0.0243 (0.0284) loss_rpn_box_reg: 0.04
03 (0.0404) time: 1.8132 data: 0.0068 max mem: 3761
Epoch: [18] [110/148] eta: 0:01:12 lr: 0.000000 loss: 0.1515
(0.1488) loss_classifier: 0.0556 (0.0576) loss_box_reg: 0.0180
(0.0221) loss_objectness: 0.0276 (0.0292) loss_rpn_box_reg: 0.03
85 (0.0400) time: 1.7668 data: 0.0065 max mem: 3761
Epoch: [18] [120/148] eta: 0:00:53 lr: 0.000000 loss: 0.1469
(0.1496) loss_classifier: 0.0564 (0.0578) loss_box_reg: 0.0203
(0.0225) loss_objectness: 0.0288 (0.0295) loss_rpn_box_reg: 0.03
38 (0.0398) time: 1.7688 data: 0.0061 max mem: 3761
Epoch: [18] [130/148] eta: 0:00:34 lr: 0.000000 loss: 0.1401
(0.1512) loss_classifier: 0.0493 (0.0576) loss_box_reg: 0.0193
(0.0229) loss_objectness: 0.0288 (0.0306) loss_rpn_box_reg: 0.03
49 (0.0402) time: 1.9102 data: 0.0060 max mem: 3761
Epoch: [18] [140/148] eta: 0:00:15 lr: 0.000000 loss: 0.1427
(0.1511) loss_classifier: 0.0553 (0.0578) loss_box_reg: 0.0210
(0.0229) loss_objectness: 0.0228 (0.0301) loss_rpn_box_reg: 0.03
64 (0.0403) time: 2.0109 data: 0.0086 max mem: 3761
Epoch: [18] [147/148] eta: 0:00:01 lr: 0.000000 loss: 0.1366
(0.1523) loss_classifier: 0.0468 (0.0582) loss_box_reg: 0.0205
(0.0230) loss_objectness: 0.0250 (0.0304) loss_rpn_box_reg: 0.03
64 (0.0408) time: 1.9162 data: 0.0085 max mem: 3761
Epoch: [18] Total time: 0:04:42 (1.9060 s / it)
creating index...
index created!
Test: [ 0/34] eta: 0:00:33 model_time: 0.7133 (0.7133) evaluator_time: 0.0032 (0.0032) time: 0.9918 data: 0.2729 max mem: 3761
Test: [33/34] eta: 0:00:00 model_time: 0.6930 (0.6979) evaluator_time: 0.0037 (0.0034) time: 0.7096 data: 0.0059 max mem: 3761
Test: Total time: 0:00:24 (0.7188 s / it)
Averaged stats: model_time: 0.6930 (0.6979) evaluator_time: 0.0037 (0.0034)
Accumulating evaluation results...
DONE (t=0.05s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=100 ] = 0.435
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=100 ] = 0.537
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=100 ] = 0.506
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=100 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=100 ] = -1.000
```

```

00 ] = 0.606
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.444
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.571
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.843
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.843
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.813
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.846
creating index...
index created!
Test: [ 0/148] eta: 0:03:45 model_time: 1.1857 (1.1857) evalua
tor_time: 0.0037 (0.0037) time: 1.5260 data: 0.3337 max mem: 376
1
Test: [100/148] eta: 0:00:37 model_time: 0.6980 (0.7713) evalua
tor_time: 0.0031 (0.0034) time: 0.7722 data: 0.0061 max mem: 376
1
Test: [147/148] eta: 0:00:00 model_time: 0.7026 (0.7933) evalua
tor_time: 0.0032 (0.0033) time: 0.8242 data: 0.0062 max mem: 376
1
Test: Total time: 0:01:59 (0.8078 s / it)
Averaged stats: model_time: 0.7026 (0.7933) evaluator_time: 0.0032
(0.0033)
Accumulating evaluation results...
DONE (t=0.11s).
IoU metric: bbox
Average Precision (AP) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.172
Average Precision (AP) @[ IoU=0.50 | area= all | maxDets=1
00 ] = 0.244
Average Precision (AP) @[ IoU=0.75 | area= all | maxDets=1
00 ] = 0.182
Average Precision (AP) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Precision (AP) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.398
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.169
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.405
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.508
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.508
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.646
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.502
Epoch: [19] [ 0/148] eta: 0:04:38 lr: 0.000000 loss: 0.1619
(0.1619) loss_classifier: 0.0580 (0.0580) loss_box_reg: 0.0180
(0.0180) loss_objectness: 0.0449 (0.0449) loss_rpn_box_reg: 0.04
10 (0.0410) time: 1.8828 data: 0.2535 max mem: 3761
Epoch: [19] [ 10/148] eta: 0:04:00 lr: 0.000000 loss: 0.1403

```



```
(0.1822) loss_classifier: 0.0457 (0.0518) loss_box_reg: 0.0180
(0.0200) loss_objectness: 0.0376 (0.0621) loss_rpn_box_reg: 0.04
10 (0.0483) time: 1.7433 data: 0.0341 max mem: 3761
Epoch: [19] [ 20/148] eta: 0:03:47 lr: 0.000000 loss: 0.1403
(0.1704) loss_classifier: 0.0565 (0.0562) loss_box_reg: 0.0186
(0.0213) loss_objectness: 0.0278 (0.0488) loss_rpn_box_reg: 0.03
27 (0.0440) time: 1.7711 data: 0.0081 max mem: 3761
Epoch: [19] [ 30/148] eta: 0:03:31 lr: 0.000000 loss: 0.1426
(0.1620) loss_classifier: 0.0633 (0.0559) loss_box_reg: 0.0186
(0.0225) loss_objectness: 0.0278 (0.0423) loss_rpn_box_reg: 0.02
99 (0.0413) time: 1.8179 data: 0.0054 max mem: 3761
Epoch: [19] [ 40/148] eta: 0:03:17 lr: 0.000000 loss: 0.1506
(0.1622) loss_classifier: 0.0487 (0.0570) loss_box_reg: 0.0149
(0.0227) loss_objectness: 0.0256 (0.0399) loss_rpn_box_reg: 0.03
76 (0.0426) time: 1.8832 data: 0.0110 max mem: 3761
Epoch: [19] [ 50/148] eta: 0:03:00 lr: 0.000000 loss: 0.1528
(0.1603) loss_classifier: 0.0597 (0.0578) loss_box_reg: 0.0198
(0.0226) loss_objectness: 0.0217 (0.0369) loss_rpn_box_reg: 0.03
78 (0.0430) time: 1.9285 data: 0.0110 max mem: 3761
Epoch: [19] [ 60/148] eta: 0:02:44 lr: 0.000000 loss: 0.1404
(0.1584) loss_classifier: 0.0605 (0.0589) loss_box_reg: 0.0213
(0.0224) loss_objectness: 0.0231 (0.0348) loss_rpn_box_reg: 0.03
63 (0.0423) time: 1.9633 data: 0.0085 max mem: 3761
Epoch: [19] [ 70/148] eta: 0:02:24 lr: 0.000000 loss: 0.1328
(0.1555) loss_classifier: 0.0460 (0.0571) loss_box_reg: 0.0183
(0.0227) loss_objectness: 0.0247 (0.0340) loss_rpn_box_reg: 0.03
59 (0.0418) time: 1.8769 data: 0.0083 max mem: 3761
Epoch: [19] [ 80/148] eta: 0:02:05 lr: 0.000000 loss: 0.1329
(0.1575) loss_classifier: 0.0460 (0.0585) loss_box_reg: 0.0184
(0.0243) loss_objectness: 0.0183 (0.0338) loss_rpn_box_reg: 0.03
26 (0.0409) time: 1.7777 data: 0.0062 max mem: 3761
Epoch: [19] [ 90/148] eta: 0:01:47 lr: 0.000000 loss: 0.1472
(0.1614) loss_classifier: 0.0573 (0.0594) loss_box_reg: 0.0184
(0.0243) loss_objectness: 0.0217 (0.0360) loss_rpn_box_reg: 0.03
66 (0.0416) time: 1.8641 data: 0.0065 max mem: 3761
Epoch: [19] [100/148] eta: 0:01:29 lr: 0.000000 loss: 0.1167
(0.1575) loss_classifier: 0.0466 (0.0588) loss_box_reg: 0.0139
(0.0235) loss_objectness: 0.0190 (0.0345) loss_rpn_box_reg: 0.03
18 (0.0407) time: 1.9561 data: 0.0065 max mem: 3761
Epoch: [19] [110/148] eta: 0:01:10 lr: 0.000000 loss: 0.1144
(0.1560) loss_classifier: 0.0467 (0.0586) loss_box_reg: 0.0142
(0.0234) loss_objectness: 0.0146 (0.0336) loss_rpn_box_reg: 0.03
18 (0.0404) time: 1.9123 data: 0.0105 max mem: 3761
Epoch: [19] [120/148] eta: 0:00:52 lr: 0.000000 loss: 0.1398
(0.1578) loss_classifier: 0.0595 (0.0592) loss_box_reg: 0.0186
(0.0238) loss_objectness: 0.0249 (0.0338) loss_rpn_box_reg: 0.03
81 (0.0411) time: 1.9198 data: 0.0106 max mem: 3761
Epoch: [19] [130/148] eta: 0:00:33 lr: 0.000000 loss: 0.1428
(0.1563) loss_classifier: 0.0538 (0.0586) loss_box_reg: 0.0162
(0.0233) loss_objectness: 0.0210 (0.0329) loss_rpn_box_reg: 0.04
17 (0.0415) time: 1.9146 data: 0.0062 max mem: 3761
Epoch: [19] [140/148] eta: 0:00:15 lr: 0.000000 loss: 0.1414
(0.1563) loss_classifier: 0.0470 (0.0581) loss_box_reg: 0.0149
(0.0235) loss_objectness: 0.0211 (0.0333) loss_rpn_box_reg: 0.03
67 (0.0414) time: 1.8675 data: 0.0063 max mem: 3761
Epoch: [19] [147/148] eta: 0:00:01 lr: 0.000000 loss: 0.1412
(0.1559) loss_classifier: 0.0496 (0.0581) loss_box_reg: 0.0167
(0.0233) loss_objectness: 0.0188 (0.0330) loss_rpn_box_reg: 0.02
97 (0.0414) time: 1.9721 data: 0.0064 max mem: 3761
Epoch: [19] Total time: 0:04:39 (1.8862 s / it)
creating index...
```

index created!

Test: [0/34] eta: 0:00:32 model_time: 0.7160 (0.7160) evaluator_time: 0.0054 (0.0054) time: 0.9445 data: 0.2203 max mem: 3761
 Test: [33/34] eta: 0:00:00 model_time: 0.6943 (0.6984) evaluator_time: 0.0040 (0.0035) time: 0.7093 data: 0.0055 max mem: 3761
 Test: Total time: 0:00:24 (0.7175 s / it)

Averaged stats: model_time: 0.6943 (0.6984) evaluator_time: 0.0040 (0.0035)

Accumulating evaluation results...

DONE (t=0.06s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.435

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.537

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.506

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.606

Average Precision (AP) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.444

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.571

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=10] = 0.843

Average Recall (AR) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.843

Average Recall (AR) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Recall (AR) @[IoU=0.50:0.95 | area=medium | maxDets=100] = 0.813

Average Recall (AR) @[IoU=0.50:0.95 | area= large | maxDets=100] = 0.846

creating index...

index created!

Test: [0/148] eta: 0:02:31 model_time: 0.7628 (0.7628) evaluator_time: 0.0046 (0.0046) time: 1.0214 data: 0.2516 max mem: 3761

Test: [100/148] eta: 0:00:38 model_time: 0.7020 (0.7865) evaluator_time: 0.0031 (0.0033) time: 0.8620 data: 0.0062 max mem: 3761

Test: [147/148] eta: 0:00:00 model_time: 0.6964 (0.8080) evaluator_time: 0.0035 (0.0033) time: 0.8553 data: 0.0167 max mem: 3761

Test: Total time: 0:02:01 (0.8228 s / it)

Averaged stats: model_time: 0.6964 (0.8080) evaluator_time: 0.0035 (0.0033)

Accumulating evaluation results...

DONE (t=0.11s).

IoU metric: bbox

Average Precision (AP) @[IoU=0.50:0.95 | area= all | maxDets=100] = 0.176

Average Precision (AP) @[IoU=0.50 | area= all | maxDets=100] = 0.253

Average Precision (AP) @[IoU=0.75 | area= all | maxDets=100] = 0.186

Average Precision (AP) @[IoU=0.50:0.95 | area= small | maxDets=100] = -1.000

Average Precision (AP) @[IoU=0.50:0.95 | area=medium | maxDets=1

```

00 ] = 0.254
Average Precision (AP) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.177
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
1 ] = 0.422
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=
10 ] = 0.503
Average Recall (AR) @[ IoU=0.50:0.95 | area= all | maxDets=1
00 ] = 0.503
Average Recall (AR) @[ IoU=0.50:0.95 | area= small | maxDets=1
00 ] = -1.000
Average Recall (AR) @[ IoU=0.50:0.95 | area=medium | maxDets=1
00 ] = 0.532
Average Recall (AR) @[ IoU=0.50:0.95 | area= large | maxDets=1
00 ] = 0.502
That's it!
Starting the daemon thread to refresh tokens in background for proc
ess with pid = 123970

```

```

[2021-01-05T01:10:59.996785] The experiment completed successfully.
Finalizing run...
[2021-01-05T01:10:59.996811] Start FinalizingInRunHistory
[2021-01-05T01:10:59.997289] Logging experiment finalizing status i
n history service.
Cleaning up all outstanding Run operations, waiting 300.0 seconds
2 items cleaning up...
Cleanup took 0.128892183303833 seconds
[2021-01-05T01:11:04.238109] Finished context manager injector.

```

Execution Summary

=====

```

RunId: torchvision_1609800475_f35fb8e1
Web View: https://ml.azure.com/experiments/torchvision/runs/torchvi
sion_1609800475_f35fb8e1?wsid=/subscriptions/1db0a5ce-7de1-4082-8e2
5-3c5a4e5a9a98/resourcegroups/ProjektAzure/workspaces/ProjektAzure

```

In [28]:

```

with open('metrixs.txt', 'w') as f:
    for item in metrics:
        f.write("%s\n" % item)

```

In [56]:

```
#STAD możesz odpalać
```

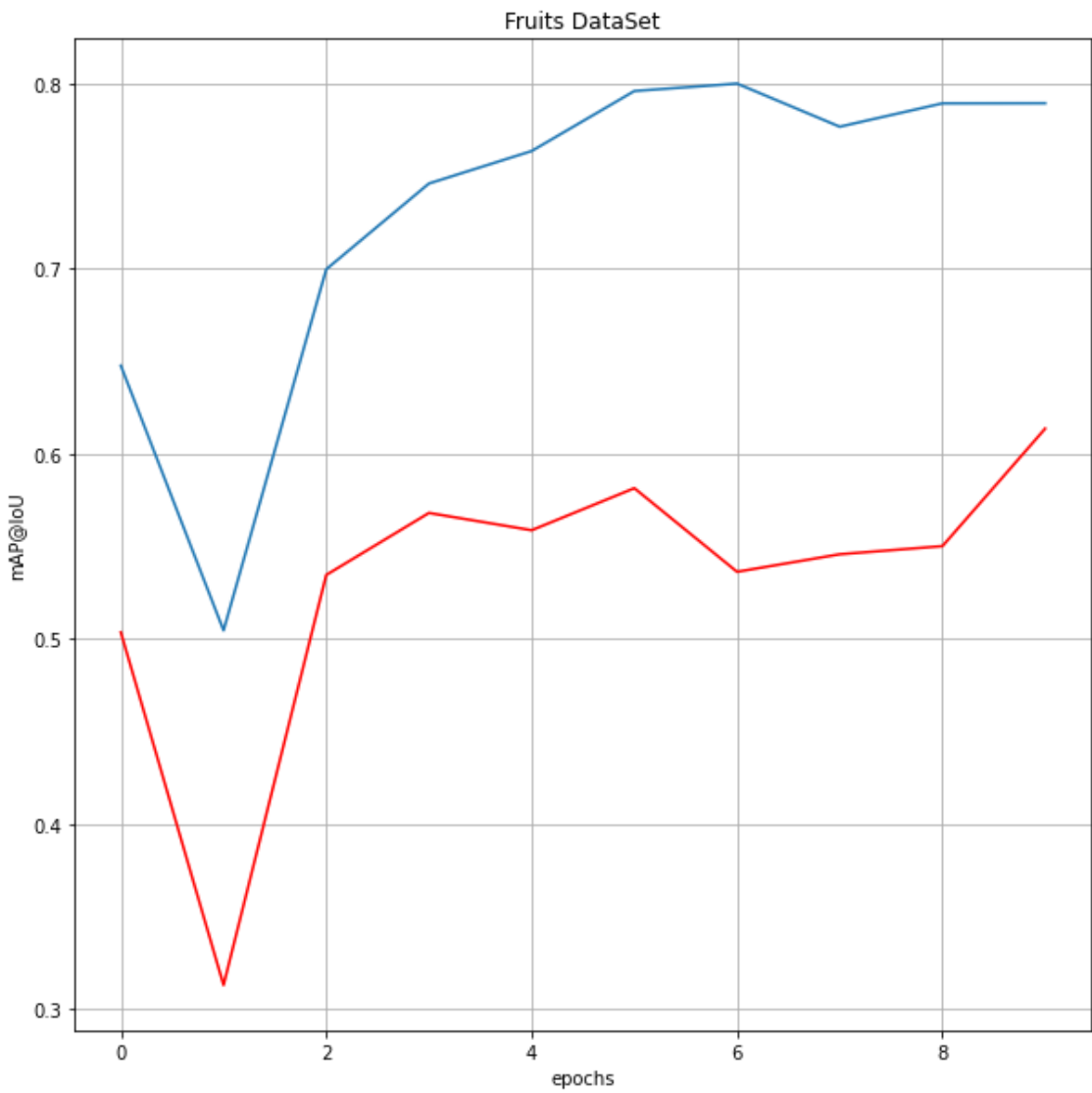
Dokładny opis datasetów

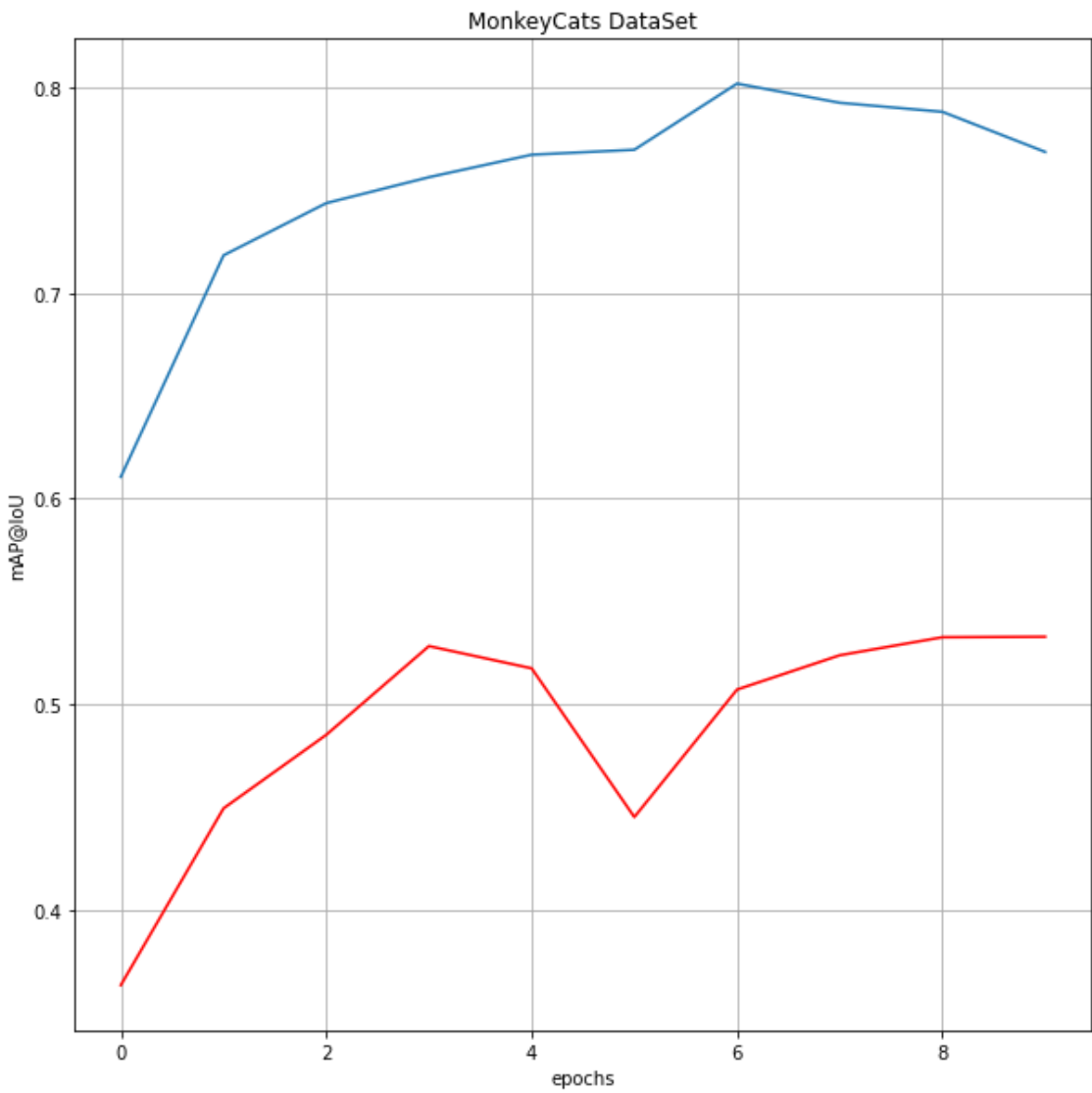
In [14]:

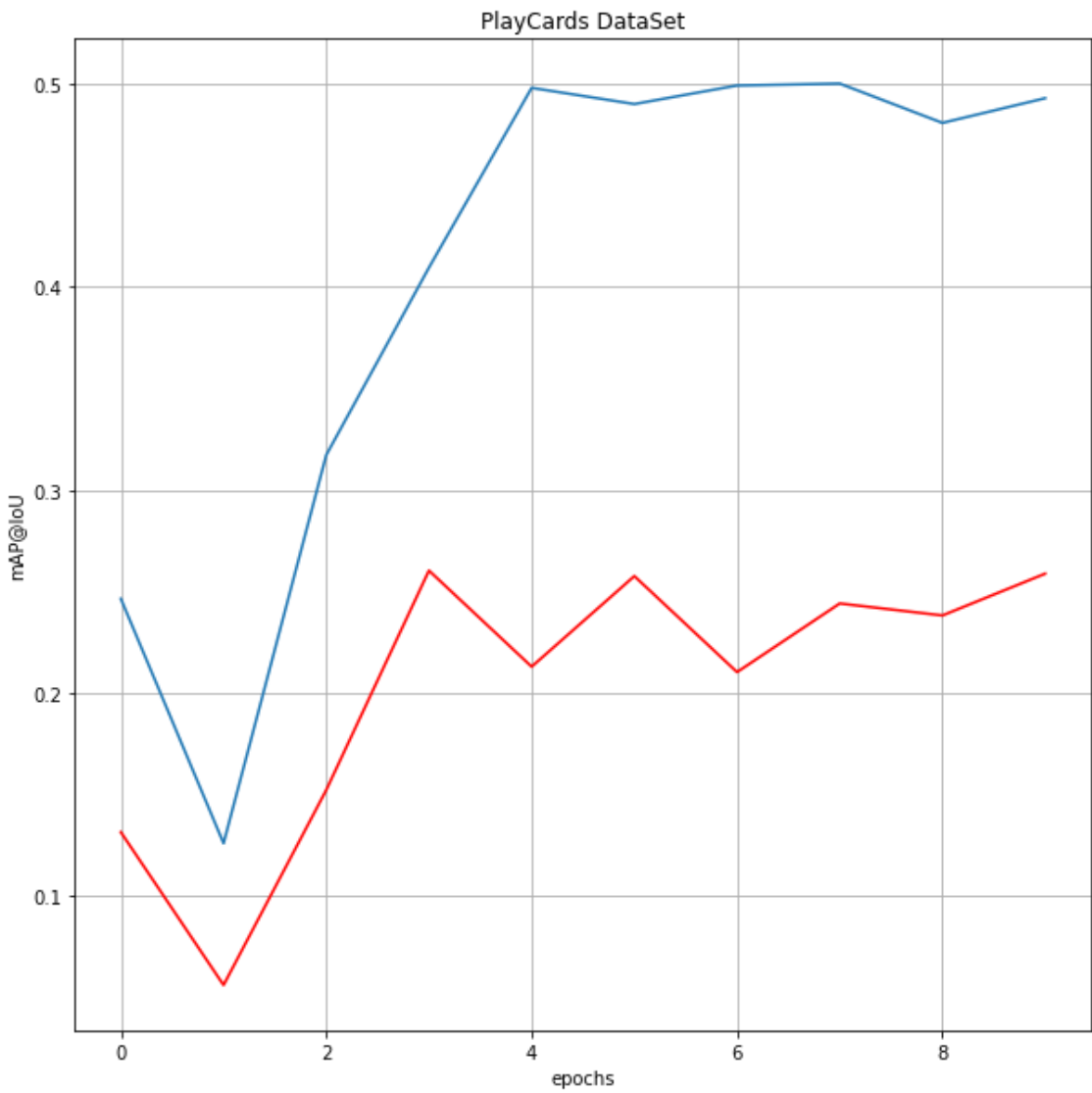
```
from matplotlib import pyplot as plt
def plotmAP(fileName,dataSets):
    with open(fileName, 'r') as f:
        for line, title in zip(f.readlines(), dataSets):
            dic = eval(line)
            plt.figure(figsize=(10,10))
            plt.plot(dic['mAP@IoU=0.50'][:,2])
            plt.plot(dic['mAP@IoU=0.50'][1::2], color="red")
            plt.title(title)
            plt.xlabel("epochs")
            plt.ylabel("mAP@IoU")
            plt.grid()
            plt.show()
```

In [15]:

```
plotmAP("metrixs-1.txt",['Fruits DataSet', 'MonkeyCats DataSet', 'PlayCards DataSet'])
```

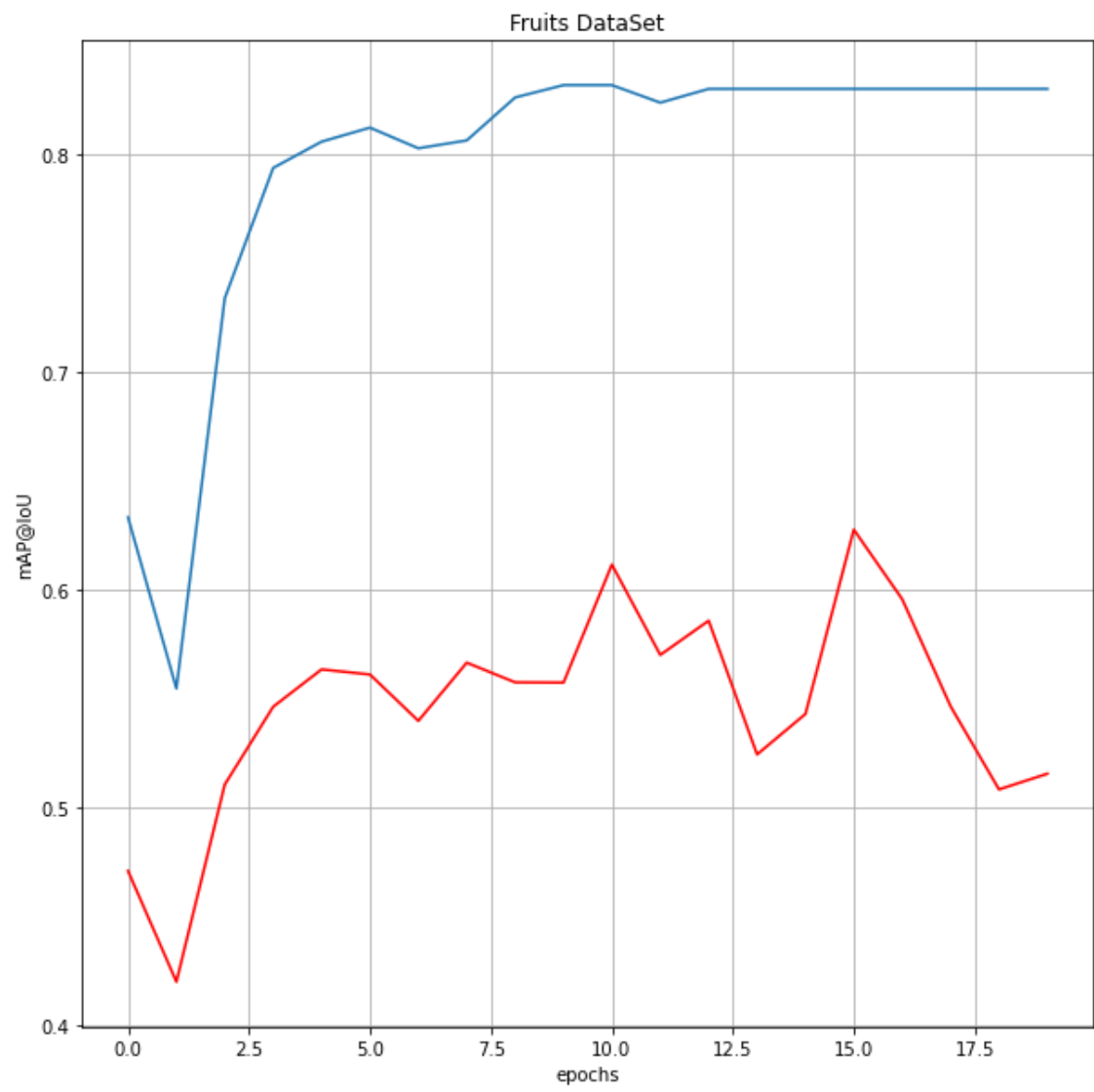


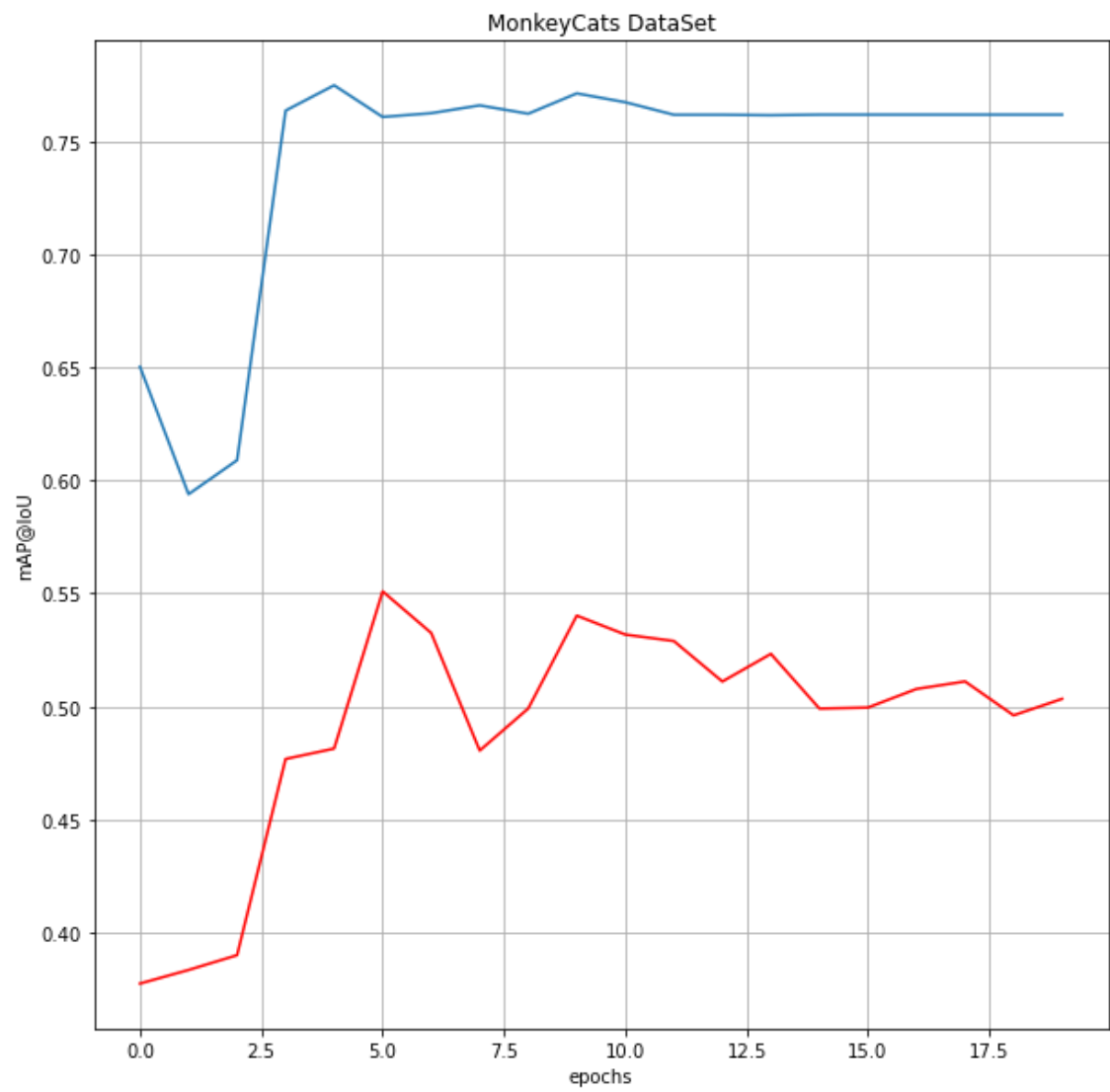


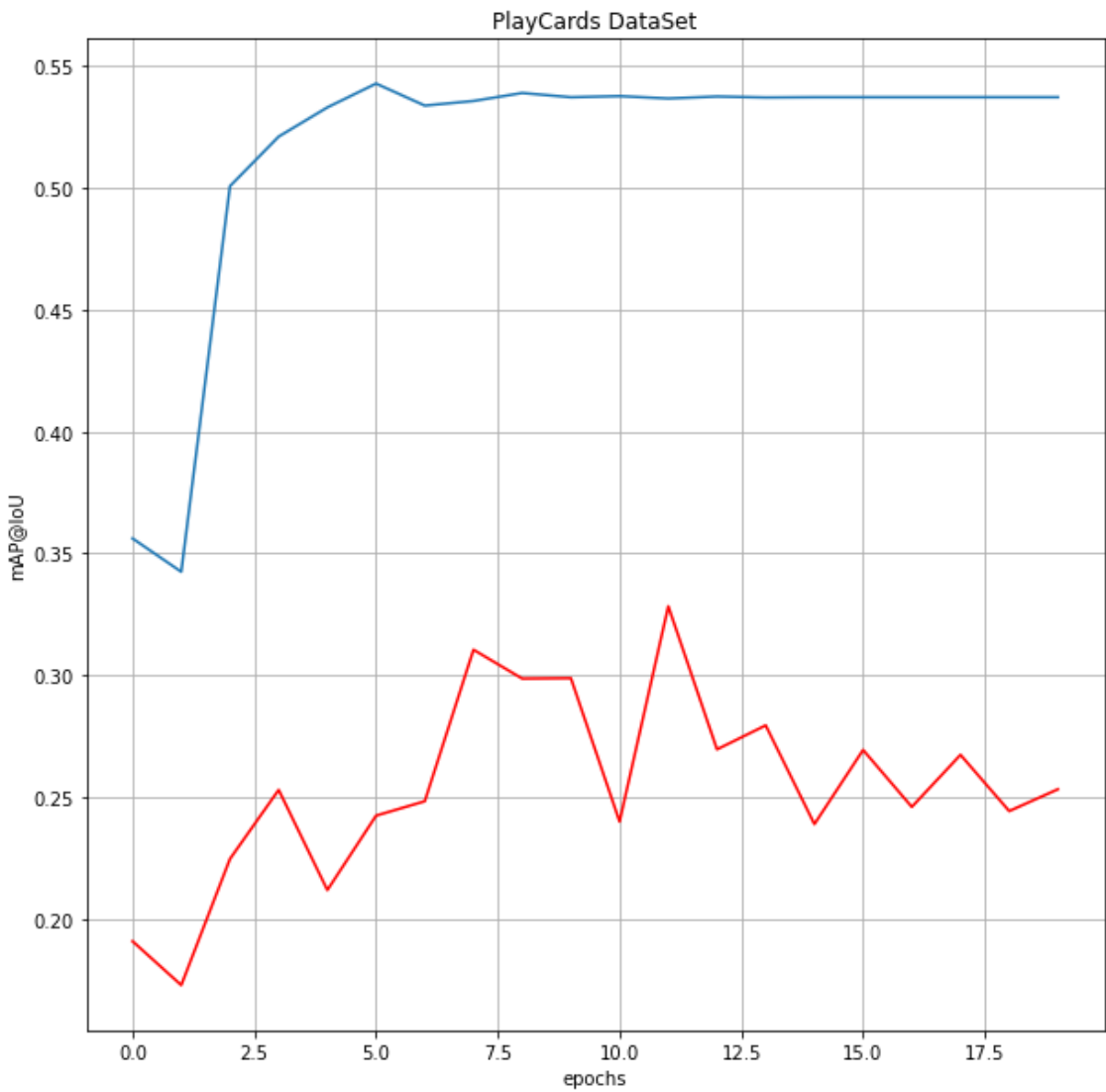


In [16]:

```
plotmAP("metrixs.txt",['Fruits DataSet', 'MonkeyCats DataSet', 'PlayCards DataS  
et'])
```







In [41]:

```

def makePrediction(num_classes,dataset,model_path,index,labels_dict):
    anchor_sizes = "16,32,64,128,256,512"
    anchor_aspect_ratios = "0.25,0.5,1.0,2.0"
    rpn_nms_threshold = 0.5
    box_nms_threshold = 0.3
    box_score_threshold = 0.1
    num_box_detections = 100

    #prepare model to make prediction
    model = get_model(
        num_classes,
        anchor_sizes,
        anchor_aspect_ratios,
        rpn_nms_threshold,
        box_nms_threshold,
        box_score_threshold,
        num_box_detections,
    )
    #model_path = "model_latest.pth"
    model.load_state_dict(torch.load(model_path))
    device = torch.device("cuda") if torch.cuda.is_available() else torch.device
("cpu")
    model.to(device)

    # Use a random subset of the data to visualize predictions on the images.
    data_path = "./scripts"
    #dataset = BuildDataset(data_path, "Fruit", get_transform(train=False), train
n=False)
    dataset = BuildDataset(data_path, dataset, get_transform(train=False), train
=False)
    #prediction
    img, _ = dataset[index]
    model.eval()
    with torch.no_grad():
        prediction = model([img.to(device)])
    img = Image.fromarray(img.mul(255).permute(1, 2, 0).byte().numpy())
    preds = prediction[0]["boxes"].cpu().numpy()
    print(prediction[0]["scores"])
    print(prediction[0]['labels'])
    draw = ImageDraw.Draw(img)
    for i in range(len(preds)):
        if prediction[0]["scores"][i].item() > 0.5:
            draw.rectangle(
                ((preds[i][0], preds[i][1]), (preds[i][2], preds[i][3])), outlin
e="red"
            )
            draw.text((preds[i][0], preds[i][1]), labels_dict[prediction[0]['lab
els'][i].item()], fill=(52, 55, 235,128))
    display(img)

```

Porównanie z Custom Vision

Dataset Fruits

Po wytrenowaniu Custom Vision otrzymaliśmy takie wyniki dla datasetu Fruits:

- **Precision** - jak prawdopodobne jest, że jest to prawda?
- **Recall** - spośród tagów, które należy prawidłowo przewidzieć, jaki procent poprawnie znalazł twój model?
- **mAP** - (średnia dokładność) ogólna wydajność detektora obiektów we wszystkich znacznikach

Przykład wykrywania obiektu na zdjęciu. Jest pokazane, że to jest banan.

Custom Vision

Zdjęcie dla Custom Vision:

Prediction:

Mask R-CNN

In [42]:

```
#Można pobawić się z predykcją  
labels_dict = {1: 'apple', 2: 'orange', 3: 'banana'}  
makePrediction(4, "Fruit", "Fruitmodel_latest.pth", 25, labels_dict)
```

```
tensor([0.8869, 0.4075, 0.2982], device='cuda:0')  
tensor([3, 1, 3], device='cuda:0')
```



Dataset Monkey Cat Dog

Po wytrenowaniu Custom Vision otrzymaliśmy takie wyniki dla datasetu Monkey Cat Dog:

- **Precision** - jak prawdopodobne jest, że jest to prawda?
- **Recall** - spośród tagów, które należy prawidłowo przewidzieć, jaki procent poprawnie znalazł twój model?
- **mAP** - (średnia dokładność) ogólna wydajność detektora obiektów we wszystkich znacznikach

Custom Vision

Zdjęcie dla Custom Vision:

Prediction:

Mask R-CNN

In [45]:

```
labels_dict = {1: "cat", 2: "dog", 3: "monkey"}  
makePrediction(4, "monkeyCats", "monkeyCatsmodel_latest1.pth", 11, labels_dict)
```



```
tensor([0.9081, 0.4157], device='cuda:0')  
tensor([3, 1], device='cuda:0')
```



Mask R-CNN

In [54]:

```
labels_dict = {1: 'ace', 2: 'king', 3: 'queen', 4: 'jack', 5: 'ten', 6: 'nine'}  
makePrediction(7, "PlayCards", "PlayCardsmodel_latest1.pth", 55, labels_dict)
```

```
tensor([0.8226, 0.5251, 0.1733, 0.1463], device='cuda:0')  
tensor([1, 1, 5, 6], device='cuda:0')
```



In [17]:

```
num_classes = 4
anchor_sizes = "16,32,64,128,256,512"
anchor_aspect_ratios = "0.25,0.5,1.0,2.0"
rpn_nms_threshold = 0.5
box_nms_threshold = 0.3
box_score_threshold = 0.1
num_box_detections = 100
```

In [24]:

```
# Load Mask RCNN model
model = get_model(
    num_classes,
    anchor_sizes,
    anchor_aspect_ratios,
    rpn_nms_threshold,
    box_nms_threshold,
    box_score_threshold,
    num_box_detections,
)
```

In [25]:

```
model_path = "model_latest.pth"
model.load_state_dict(torch.load(model_path))
device = torch.device("cuda") if torch.cuda.is_available() else torch.device("cpu")
model.to(device)
```

Out[25]:

```
MaskRCNN(
  (transform): GeneralizedRCNNTransform(
    Normalize(mean=[0.485, 0.456, 0.406], std=[0.229, 0.224, 0.22
5])
    Resize(min_size=(800,), max_size=1333, mode='bilinear')
  )
  (backbone): BackboneWithFPN(
    (body): IntermediateLayerGetter(
      (conv1): Conv2d(3, 64, kernel_size=(7, 7), stride=(2, 2), pad
ding=(3, 3), bias=False)
      (bn1): FrozenBatchNorm2d(64)
      (relu): ReLU(inplace=True)
      (maxpool): MaxPool2d(kernel_size=3, stride=2, padding=1, dila
tion=1, ceil_mode=False)
      (layer1): Sequential(
        (0): Bottleneck(
          (conv1): Conv2d(64, 64, kernel_size=(1, 1), stride=(1,
1), bias=False)
          (bn1): FrozenBatchNorm2d(64)
          (conv2): Conv2d(64, 64, kernel_size=(3, 3), stride=(1,
1), padding=(1, 1), bias=False)
          (bn2): FrozenBatchNorm2d(64)
          (conv3): Conv2d(64, 256, kernel_size=(1, 1), stride=(1,
1), bias=False)
          (bn3): FrozenBatchNorm2d(256)
          (relu): ReLU(inplace=True)
          (downsample): Sequential(
            (0): Conv2d(64, 256, kernel_size=(1, 1), stride=(1, 1),
bias=False)
            (1): FrozenBatchNorm2d(256)
          )
        )
        (1): Bottleneck(
          (conv1): Conv2d(256, 64, kernel_size=(1, 1), stride=(1,
1), bias=False)
          (bn1): FrozenBatchNorm2d(64)
          (conv2): Conv2d(64, 64, kernel_size=(3, 3), stride=(1,
1), padding=(1, 1), bias=False)
          (bn2): FrozenBatchNorm2d(64)
          (conv3): Conv2d(64, 256, kernel_size=(1, 1), stride=(1,
1), bias=False)
          (bn3): FrozenBatchNorm2d(256)
          (relu): ReLU(inplace=True)
        )
        (2): Bottleneck(
          (conv1): Conv2d(256, 64, kernel_size=(1, 1), stride=(1,
1), bias=False)
          (bn1): FrozenBatchNorm2d(64)
          (conv2): Conv2d(64, 64, kernel_size=(3, 3), stride=(1,
1), padding=(1, 1), bias=False)
          (bn2): FrozenBatchNorm2d(64)
          (conv3): Conv2d(64, 256, kernel_size=(1, 1), stride=(1,
1), bias=False)
          (bn3): FrozenBatchNorm2d(256)
          (relu): ReLU(inplace=True)
        )
      )
    )
    (layer2): Sequential(
      (0): Bottleneck(
```

```

        (conv1): Conv2d(256, 128, kernel_size=(1, 1), stride=(1,
1), bias=False)
        (bn1): FrozenBatchNorm2d(128)
        (conv2): Conv2d(128, 128, kernel_size=(3, 3), stride=(2,
2), padding=(1, 1), bias=False)
        (bn2): FrozenBatchNorm2d(128)
        (conv3): Conv2d(128, 512, kernel_size=(1, 1), stride=(1,
1), bias=False)
        (bn3): FrozenBatchNorm2d(512)
        (relu): ReLU(inplace=True)
        (downsample): Sequential(
          (0): Conv2d(256, 512, kernel_size=(1, 1), stride=(2,
2), bias=False)
          (1): FrozenBatchNorm2d(512)
        )
      )
    (1): Bottleneck(
      (conv1): Conv2d(512, 128, kernel_size=(1, 1), stride=(1,
1), bias=False)
      (bn1): FrozenBatchNorm2d(128)
      (conv2): Conv2d(128, 128, kernel_size=(3, 3), stride=(1,
1), padding=(1, 1), bias=False)
      (bn2): FrozenBatchNorm2d(128)
      (conv3): Conv2d(128, 512, kernel_size=(1, 1), stride=(1,
1), bias=False)
      (bn3): FrozenBatchNorm2d(512)
      (relu): ReLU(inplace=True)
    )
    (2): Bottleneck(
      (conv1): Conv2d(512, 128, kernel_size=(1, 1), stride=(1,
1), bias=False)
      (bn1): FrozenBatchNorm2d(128)
      (conv2): Conv2d(128, 128, kernel_size=(3, 3), stride=(1,
1), padding=(1, 1), bias=False)
      (bn2): FrozenBatchNorm2d(128)
      (conv3): Conv2d(128, 512, kernel_size=(1, 1), stride=(1,
1), bias=False)
      (bn3): FrozenBatchNorm2d(512)
      (relu): ReLU(inplace=True)
    )
    (3): Bottleneck(
      (conv1): Conv2d(512, 128, kernel_size=(1, 1), stride=(1,
1), bias=False)
      (bn1): FrozenBatchNorm2d(128)
      (conv2): Conv2d(128, 128, kernel_size=(3, 3), stride=(1,
1), padding=(1, 1), bias=False)
      (bn2): FrozenBatchNorm2d(128)
      (conv3): Conv2d(128, 512, kernel_size=(1, 1), stride=(1,
1), bias=False)
      (bn3): FrozenBatchNorm2d(512)
      (relu): ReLU(inplace=True)
    )
  )
(layer3): Sequential(
  (0): Bottleneck(
    (conv1): Conv2d(512, 256, kernel_size=(1, 1), stride=(1,
1), bias=False)
    (bn1): FrozenBatchNorm2d(256)
    (conv2): Conv2d(256, 256, kernel_size=(3, 3), stride=(2,
2), padding=(1, 1), bias=False)
    (bn2): FrozenBatchNorm2d(256)

```

```

        (conv3): Conv2d(256, 1024, kernel_size=(1, 1), stride=(1,
1), bias=False)
        (bn3): FrozenBatchNorm2d(1024)
        (relu): ReLU(inplace=True)
        (downsample): Sequential(
          (0): Conv2d(512, 1024, kernel_size=(1, 1), stride=(2,
2), bias=False)
          (1): FrozenBatchNorm2d(1024)
        )
      )
    (1): Bottleneck(
      (conv1): Conv2d(1024, 256, kernel_size=(1, 1), stride=(1,
1), bias=False)
      (bn1): FrozenBatchNorm2d(256)
      (conv2): Conv2d(256, 256, kernel_size=(3, 3), stride=(1,
1), padding=(1, 1), bias=False)
      (bn2): FrozenBatchNorm2d(256)
      (conv3): Conv2d(256, 1024, kernel_size=(1, 1), stride=(1,
1), bias=False)
      (bn3): FrozenBatchNorm2d(1024)
      (relu): ReLU(inplace=True)
    )
    (2): Bottleneck(
      (conv1): Conv2d(1024, 256, kernel_size=(1, 1), stride=(1,
1), bias=False)
      (bn1): FrozenBatchNorm2d(256)
      (conv2): Conv2d(256, 256, kernel_size=(3, 3), stride=(1,
1), padding=(1, 1), bias=False)
      (bn2): FrozenBatchNorm2d(256)
      (conv3): Conv2d(256, 1024, kernel_size=(1, 1), stride=(1,
1), bias=False)
      (bn3): FrozenBatchNorm2d(1024)
      (relu): ReLU(inplace=True)
    )
    (3): Bottleneck(
      (conv1): Conv2d(1024, 256, kernel_size=(1, 1), stride=(1,
1), bias=False)
      (bn1): FrozenBatchNorm2d(256)
      (conv2): Conv2d(256, 256, kernel_size=(3, 3), stride=(1,
1), padding=(1, 1), bias=False)
      (bn2): FrozenBatchNorm2d(256)
      (conv3): Conv2d(256, 1024, kernel_size=(1, 1), stride=(1,
1), bias=False)
      (bn3): FrozenBatchNorm2d(1024)
      (relu): ReLU(inplace=True)
    )
    (4): Bottleneck(
      (conv1): Conv2d(1024, 256, kernel_size=(1, 1), stride=(1,
1), bias=False)
      (bn1): FrozenBatchNorm2d(256)
      (conv2): Conv2d(256, 256, kernel_size=(3, 3), stride=(1,
1), padding=(1, 1), bias=False)
      (bn2): FrozenBatchNorm2d(256)
      (conv3): Conv2d(256, 1024, kernel_size=(1, 1), stride=(1,
1), bias=False)
      (bn3): FrozenBatchNorm2d(1024)
      (relu): ReLU(inplace=True)
    )
    (5): Bottleneck(
      (conv1): Conv2d(1024, 256, kernel_size=(1, 1), stride=(1,
1), bias=False)

```



```

        (bn1): FrozenBatchNorm2d(256)
        (conv2): Conv2d(256, 256, kernel_size=(3, 3), stride=(1,
1), padding=(1, 1), bias=False)
        (bn2): FrozenBatchNorm2d(256)
        (conv3): Conv2d(256, 1024, kernel_size=(1, 1), stride=(1,
1), bias=False)
        (bn3): FrozenBatchNorm2d(1024)
        (relu): ReLU(inplace=True)
    )
)
(layer4): Sequential(
  (0): Bottleneck(
    (conv1): Conv2d(1024, 512, kernel_size=(1, 1), stride=(1,
1), bias=False)
    (bn1): FrozenBatchNorm2d(512)
    (conv2): Conv2d(512, 512, kernel_size=(3, 3), stride=(2,
2), padding=(1, 1), bias=False)
    (bn2): FrozenBatchNorm2d(512)
    (conv3): Conv2d(512, 2048, kernel_size=(1, 1), stride=(1,
1), bias=False)
    (bn3): FrozenBatchNorm2d(2048)
    (relu): ReLU(inplace=True)
    (downsample): Sequential(
      (0): Conv2d(1024, 2048, kernel_size=(1, 1), stride=(2,
2), bias=False)
      (1): FrozenBatchNorm2d(2048)
    )
  )
  (1): Bottleneck(
    (conv1): Conv2d(2048, 512, kernel_size=(1, 1), stride=(1,
1), bias=False)
    (bn1): FrozenBatchNorm2d(512)
    (conv2): Conv2d(512, 512, kernel_size=(3, 3), stride=(1,
1), padding=(1, 1), bias=False)
    (bn2): FrozenBatchNorm2d(512)
    (conv3): Conv2d(512, 2048, kernel_size=(1, 1), stride=(1,
1), bias=False)
    (bn3): FrozenBatchNorm2d(2048)
    (relu): ReLU(inplace=True)
  )
  (2): Bottleneck(
    (conv1): Conv2d(2048, 512, kernel_size=(1, 1), stride=(1,
1), bias=False)
    (bn1): FrozenBatchNorm2d(512)
    (conv2): Conv2d(512, 512, kernel_size=(3, 3), stride=(1,
1), padding=(1, 1), bias=False)
    (bn2): FrozenBatchNorm2d(512)
    (conv3): Conv2d(512, 2048, kernel_size=(1, 1), stride=(1,
1), bias=False)
    (bn3): FrozenBatchNorm2d(2048)
    (relu): ReLU(inplace=True)
  )
)
)
(fpn): FeaturePyramidNetwork(
  (inner_blocks): ModuleList(
    (0): Conv2d(256, 256, kernel_size=(1, 1), stride=(1, 1))
    (1): Conv2d(512, 256, kernel_size=(1, 1), stride=(1, 1))
    (2): Conv2d(1024, 256, kernel_size=(1, 1), stride=(1, 1))
    (3): Conv2d(2048, 256, kernel_size=(1, 1), stride=(1, 1))
  )
)

```

```

        (layer_blocks): ModuleList(
  (0): Conv2d(256, 256, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1))
  (1): Conv2d(256, 256, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1))
  (2): Conv2d(256, 256, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1))
  (3): Conv2d(256, 256, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1))
)
        (extra_blocks): LastLevelMaxPool()
    )
    (rpn): RegionProposalNetwork(
      (anchor_generator): AnchorGenerator()
      (head): RPNHead(
        (conv): Conv2d(256, 256, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1))
        (cls_logits): Conv2d(256, 24, kernel_size=(1, 1), stride=(1, 1))
        (bbox_pred): Conv2d(256, 96, kernel_size=(1, 1), stride=(1, 1))
      )
    )
    (roi_heads): RoIHeads(
      (box_roi_pool): MultiScaleRoIAlign()
      (box_head): TwoMLPHead(
        (fc6): Linear(in_features=12544, out_features=1024, bias=True)
        (fc7): Linear(in_features=1024, out_features=1024, bias=True)
      )
      (box_predictor): FastRCNNPredictor(
        (cls_score): Linear(in_features=1024, out_features=4, bias=True)
        (bbox_pred): Linear(in_features=1024, out_features=16, bias=True)
      )
      (mask_roi_pool): None
      (mask_head): MaskRCNNHeads(
        (mask_fcn1): Conv2d(256, 256, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1))
        (relu1): ReLU(inplace=True)
        (mask_fcn2): Conv2d(256, 256, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1))
        (relu2): ReLU(inplace=True)
        (mask_fcn3): Conv2d(256, 256, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1))
        (relu3): ReLU(inplace=True)
        (mask_fcn4): Conv2d(256, 256, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1))
        (relu4): ReLU(inplace=True)
      )
      (mask_predictor): MaskRCNNPredictor(
        (conv5_mask): ConvTranspose2d(256, 256, kernel_size=(2, 2), stride=(2, 2))
        (relu): ReLU(inplace=True)
        (mask_fcn_logits): Conv2d(256, 91, kernel_size=(1, 1), stride=(1, 1))
      )
    )
  )
)

```

In [26]:

```
# Use a random subset of the data to visualize predictions on the images.
data_path = "./scripts"
dataset = BuildDataset(data_path, "Fruit", get_transform(train=False), train=False)
# indices = torch.randperm(len(dataset)).tolist()
# dataset = torch.utils.data.Subset(dataset, indices[-50:])
```

In [27]:

```
# for i in range(5):
#     img, _ = dataset[i]
#     model.eval()
#     with torch.no_grad():
#         prediction = model([img.to(device)])
#     img = Image.fromarray(img.mul(255).permute(1, 2, 0).byte().numpy())
#     preds = prediction[0]["boxes"].cpu().numpy()
#     print(prediction[0]["scores"])
#     draw = ImageDraw.Draw(img)
#     for i in range(len(preds)):
#         draw.rectangle(
#             ((preds[i][0], preds[i][1]), (preds[i][2], preds[i][3])), outline
#             ="red"
#         )
#     display(img)
```

In [28]:

```
img, _ = dataset[1]
model.eval()
with torch.no_grad():
    prediction = model([img.to(device)])
img = Image.fromarray(img.mul(255).permute(1, 2, 0).byte().numpy())
preds = prediction[0]["boxes"].cpu().numpy()
print(prediction[0])
```

```
{'boxes': tensor([[ 9.2525, 24.6268, 350.0000, 340.1003]], device='cuda:0'), 'labels': tensor([1], device='cuda:0'), 'scores': tensor([0.6061], device='cuda:0')}
```

In [29]:

```
labels_dict = {1: 'apple', 2: 'orange', 3: 'banana'}

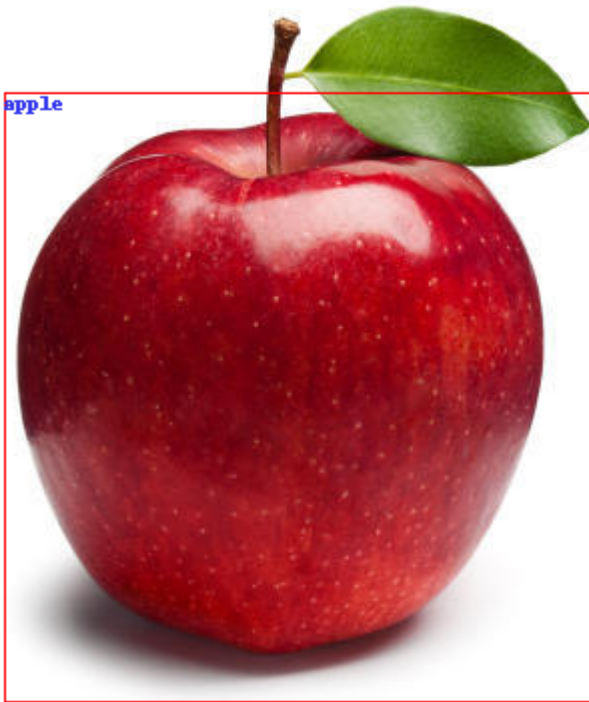
#labels_dict = {1: 'ace', 2: 'king', 3: 'queen', 4: 'jack', 5: 'ten', 6: 'nine'}

#labels_dict = {1: "cat", 2: "dog", 3: "monkey"}
```

In [30]:

```
img, _ = dataset[12]
model.eval()
with torch.no_grad():
    prediction = model([img.to(device)])
img = Image.fromarray(img.mul(255).permute(1, 2, 0).byte().numpy())
preds = prediction[0]["boxes"].cpu().numpy()
print(prediction[0]["scores"])
print(prediction[0]['labels'])
draw = ImageDraw.Draw(img)
for i in range(len(preds)):
    if prediction[0]["scores"][i].item() > 0.5:
        draw.rectangle(
            ((preds[i][0], preds[i][1]), (preds[i][2], preds[i][3])), outline="red"
        )
        draw.text((preds[i][0], preds[i][1]), labels_dict[prediction[0]['labels']
[i].item()], fill=(52, 55, 235,128))
display(img)
```

```
tensor([0.8912], device='cuda:0')
tensor([1], device='cuda:0')
```



In [39]:

```
import xml.etree.ElementTree as ET
tree = ET.parse('scripts/Data/AnnotationsTest/cam_image45.xml') #niepoprawna sci
ezka
# tree = ET.parse('scripts/Data/AnnotationsTest/cats_and_monkeys_029.xml')
t_root = tree.getroot()
img = Image.open('scripts/Data/JPEGImagesTest/cam_image45.jpg')
# img = Image.open('scripts/Data/JPEGImagesTest/cats_and_monkeys_029.jpg')
draw = ImageDraw.Draw(img)
for obj in t_root.findall("object"):
    bnd_box = obj.find("bndbox")
    xmin = float(bnd_box.find("xmin").text)
    xmax = float(bnd_box.find("xmax").text)
    ymin = float(bnd_box.find("ymin").text)
    ymax = float(bnd_box.find("ymax").text)
    label_name = str(obj.find("name").text)
    draw.rectangle(
        ((xmin, ymin), (xmax, ymax)), outline="red"
    )
    draw.text((xmin, ymin), label_name, fill=(255,255,255,128))
display(img)
```

 FileNotFoundError Traceback (most recent ca
 ll last)

```
<ipython-input-39-aee977ebc34a> in <module>
      1 import xml.etree.ElementTree as ET
----> 2 tree = ET.parse('scripts/Data/AnnotationsTest/cam_image45.x
ml')
      3 # tree = ET.parse('scripts/Data/AnnotationsTest/cats_and_mo
nkeys_029.xml')
      4 t_root = tree.getroot()
      5 img = Image.open('scripts/Data/JPEGImagesTest/cam_image45.j
pg')
```

```
/anaconda/envs/azureml_py36_pytorch/lib/python3.6/xml/etree/Element
Tree.py in parse(source, parser)
    1194     """
    1195     tree = ElementTree()
-> 1196     tree.parse(source, parser)
    1197     return tree
    1198
```

```
/anaconda/envs/azureml_py36_pytorch/lib/python3.6/xml/etree/Element
Tree.py in parse(self, source, parser)
    584     close_source = False
    585     if not hasattr(source, "read"):
--> 586         source = open(source, "rb")
    587         close_source = True
    588     try:
```

FileNotFoundError: [Errno 2] No such file or directory: 'scripts/Da
 ta/AnnotationsTest/cam_image45.xml'

In []: