# **TF-Vision Model Garden**

⚠ Disclaimer: All datasets hyperlinked from this page are not owned or distributed by Google. The dataset is made available by third parties. Please review the terms and conditions made available by the third parties before using the data.

#### **Table of Contents**

- Introduction
- Image Classification
  - ResNet models trained with vanilla settings
  - ResNet-RS models trained with various settings
  - <u>Vision Transformer (ViT)</u>
- Object Detection and Instance Segmentation
  - Common Settings and Notes
- COCO Object Detection Baselines
  - RetinaNet (ImageNet pretrained)
  - RetinaNet (Trained from scratch)
  - Mobile-size RetinaNet (Trained from scratch))
- Instance Segmentation Baselines
  - Mask R-CNN (Trained from scratch)
  - o Cascade RCNN-RS (Trained from scratch)
- Semantic Segmentation
  - PASCAL-VOC
  - <u>CITYSCAPES</u>
- Video Classification
  - Common Settings and Notes
  - Kinetics-400 Action Recognition Baselines
  - Kinetics-600 Action Recognition Baselines

#### Introduction

TF-Vision modeling library for computer vision provides a collection of baselines and checkpoints for image classification, object detection, and segmentation.

## **Image Classification**

#### ResNet models trained with vanilla settings

▶ Details

#### **ResNet-RS models trained with various settings**

▶ Details

#### **Vision Transformer (ViT)**

▶ Details

## **Object Detection and Instance Segmentation**

#### **Common Settings and Notes**

▶ Details

## **COCO Object Detection Baselines**

#### RetinaNet (ImageNet pretrained)

▶ Details

#### **RetinaNet (Trained from scratch)**

▶ Details

#### **Mobile-size RetinaNet (Trained from scratch):**

▶ Details

## **Instance Segmentation Baselines**

### Mask R-CNN (Trained from scratch)

▶ Details

## **Cascade RCNN-RS (Trained from scratch)**

▶ Details

## **Semantic Segmentation**

- We support <u>DeepLabV3</u> and <u>DeepLabV3+</u> architectures, with Dilated ResNet backbones.
- Backbones are pre-trained on ImageNet.

#### **PASCAL-VOC**

▶ Details

#### **CITYSCAPES**

▶ Details

## **Video Classification**

### **Common Settings and Notes**

▶ Details

### **Kinetics-400 Action Recognition Baselines**

▶ Details

#### **Kinetics-600 Action Recognition Baselines**

▶ Details