Papers with Code 2020 全年回顾（顶流论文+顶流代码+Benchmarks）

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导读

2020年Papers with Code 中最顶流的论文，代码和benchmark。

Papers with Code 中收集了各种机器学习的内容：论文，代码，结果，方便发现和比较。通过这些数据，我们可以了解ML社区中，今年哪些东西最有意思。下面我们总结了2020年最热门的带代码的论文、代码库和benchmark。

2020顶流论文

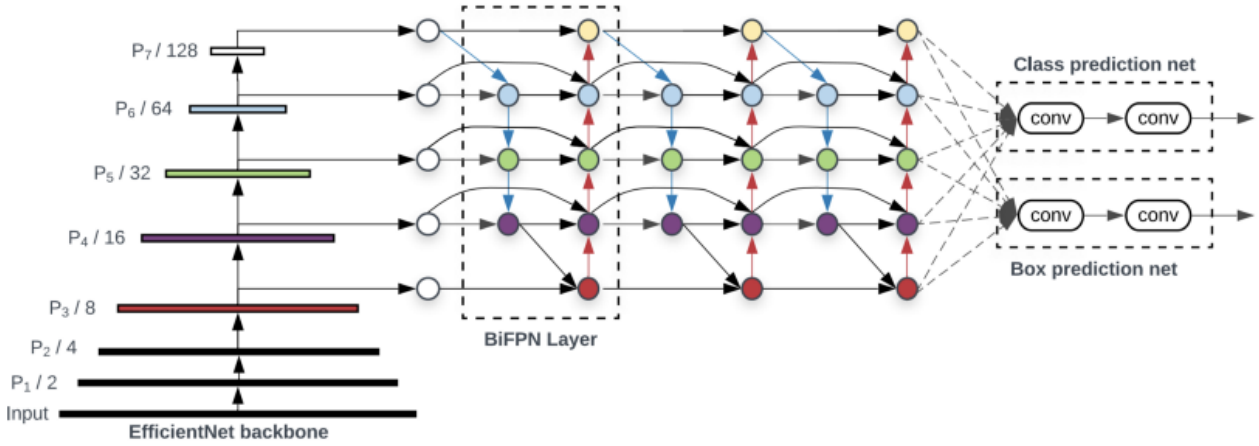


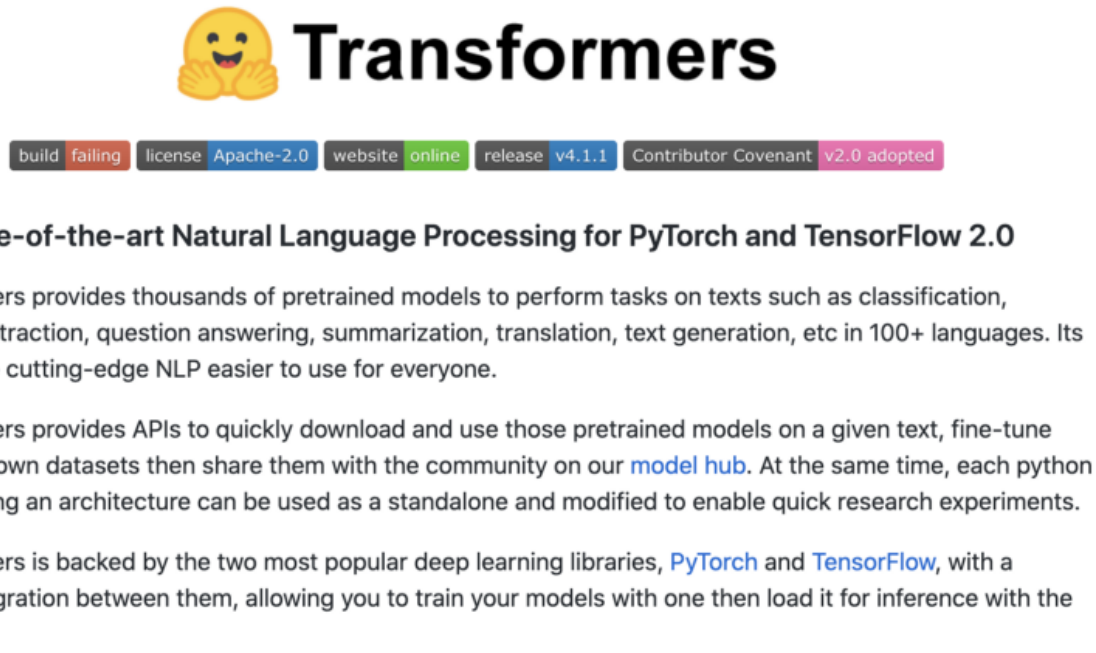
Figure 3: **EfficientDet architecture –** It employs EfficientNet [39] as the backbone network, BiFPN as the feature network, and shared class/box prediction network. Both BiFPN layers and class/box net layers are repeated multiple times based on different resource constraints as shown in Table 1.

Tan等人的EfficientDet是2020年在Papers with Code上被访问最多的论文。

1. **EfficientDet: Scalable and Efficient Object Detection** — Tan et al https://paperswith-code.com/paper/efficientdet-scalable-and-efficient-object
2. **Fixing the train-test resolution discrepancy —** Touvron et al https://paperswithcode.-com/paper/fixing-the-train-test-resolution-discrepancy-2
3. **ResNeSt: Split-Attention Networks** — Zhang et al https://paperswithcode.com/paper/resnest-split-attention-networks
4. **Big Transfer (BiT)** — Kolesnikov et al https://paperswithcode.com/paper/large-scale-learning-of-general-visual
5. **Object-Contextual Representations for Semantic Segmentation** — Yuan et al https://paperswithcode.com/paper/object-contextual-representations-for
6. **Self-training with Noisy Student improves ImageNet classification** — Xie et al https://paperswithcode.com/paper/self-training-with-noisy-student-improves
7. **YOLOv4: Optimal Speed and Accuracy of Object Detection** — Bochkovskiy et al https://paperswithcode.com/paper/yolov4-optimal-speed-and-accuracy-of-object

8. **An Image is Worth 16x16 Words: Transformers for Image Recognition at Scale** — Dosovitskiy et al https://paperswithcode.com/paper/an-image-is-worth-16x16-words-transformers-1
9. **Exploring the Limits of Transfer Learning with a Unified Text-to-Text Transformer** — Raffel et al https://paperswithcode.com/paper/exploring-the-limits-of-transfer-learning
10. **Hierarchical Multi-Scale Attention for Semantic Segmentation** — Tao et al https://paperswithcode.com/paper/hierarchical-multi-scale-attention-for

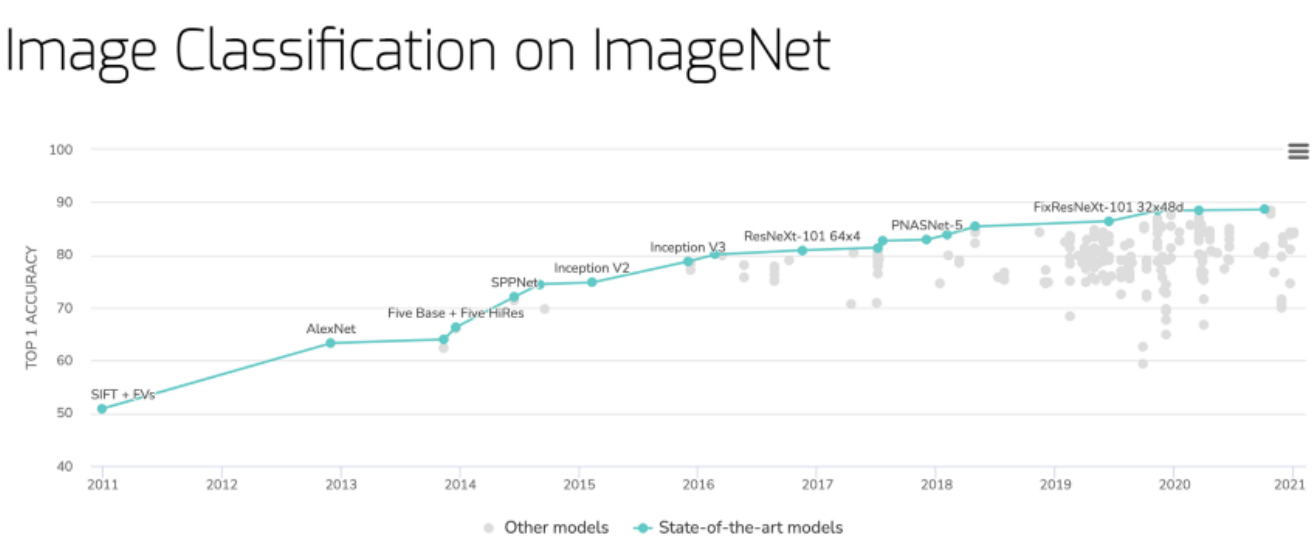
2020顶流代码库



Transformers是2020年在Papers with Code上被访问最多的代码库

1. **Transformers** — Hugging Face — https://github.com/huggingface/transformers
2. **PyTorch Image Models** — Ross Wightman — https://github.com/rwightman/pytorch-image-models
3. **Detectron2** — FAIR — https://github.com/facebookresearch/detectron2
4. **InsightFace** — DeepInsight — https://github.com/deepinsight/insightface
5. **Imgclsmob** — osmr — https://github.com/osmr/imgclsmob
6. **DarkNet** — pjreddie — https://github.com/pjreddie/darknet
7. **PyTorchGAN** — Erik Linder-Norén — https://github.com/eriklindernoren/PyTorch-GAN
8. **MMDetection** — OpenMMLab — https://github.com/open-mmlab/mmdetection
9. **FairSeq** — PyTorch — https://github.com/pytorch/fairseq
10. **Gluon CV** — DMLC — https://github.com/dmlc/gluon-cv

2020顶流Benchmarks



ImageNet是2020年在Papers with Code上访问最多的benchmark

1. **ImageNet** — Image Classification — https://paperswithcode.com/sota/image-classification-on-imagenet
2. **COCO** — Object Detection / Instance Segmentation — https://paperswithcode.com/sota/object-detection-on-coco
3. **Cityscapes** — Semantic Segmentation — https://paperswithcode.com/sota/semantic-segmentation-on-cityscapes
4. **CIFAR-10** — Image Classification — https://paperswithcode.com/sota/image-classification-on-cifar-10
5. **CIFAR-100** — Image Classification — https://paperswithcode.com/sota/image-classification-on-cifar-100
6. **PASCAL VOC 2012** — Semantic Segmentation — https://paperswithcode.com/sota/semantic-segmentation-on-pascal-voc-2012
7. **MPII Human Pose** — Pose Estimation — https://paperswithcode.com/sota/pose-estimation-on-mpii-human-pose
8. **Market-1501** — Person Re-Identification — https://paperswithcode.com/sota/person-re-identification-on-market-1501
9. **MNIST** — Image Classification — https://paperswithcode.com/sota/image-classification-on-mnist
10. **Human 3.6M** — Human Pose Estimation -https://paperswithcode.com/sota/pose-estimation-on-mpii-human-pose

英文原文：https://medium.com/paperswithcode/papers-with-code-2020-review-938146ab9658

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