

# Officially Supported TensorFlow 2.1+ Models on Cloud TPU

## Natural Language Processing

- [bert](#): A powerful pre-trained language representation model: BERT, which stands for Bidirectional Encoder Representations from Transformers. [BERT FineTuning with Cloud TPU](#) provides step by step instructions on Cloud TPU training. You can look [Bert MNLI Tensorboard.dev metrics](#) for MNLI fine tuning task.
- [transformer](#): A transformer model to translate the WMT English to German dataset. [Training transformer on Cloud TPU](#) for step by step instructions on Cloud TPU training.

## Computer Vision

- [efficientnet](#): A family of convolutional neural networks that scale by balancing network depth, width, and resolution and can be used to classify ImageNet's dataset of 1000 classes. See [Tensorboard.dev training metrics](#).
- [mnist](#): A basic model to classify digits from the MNIST dataset. See [Running MNIST on Cloud TPU](#) tutorial and [Tensorboard.dev metrics](#).
- [mask-rcnn](#): An object detection and instance segmentation model. See [Tensorboard.dev training metrics](#).
- [resnet](#): A deep residual network that can be used to classify ImageNet's dataset of 1000 classes. See [Training ResNet on Cloud TPU](#) tutorial and [Tensorboard.dev metrics](#).
- [retinanet](#): A fast and powerful object detector. See [Tensorboard.dev training metrics](#).
- [shapemask](#): An object detection and instance segmentation model using shape priors. See [Tensorboard.dev training metrics](#).

## Recommendation

- [dlrm](#): [Deep Learning Recommendation Model for Personalization and Recommendation Systems](#).
- [dcn v2](#): [Improved Deep & Cross Network and Practical Lessons for Web-scale Learning to Rank Systems](#).
- [ncf](#): Neural Collaborative Filtering. See [Tensorboard.dev training metrics](#).