

# 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.