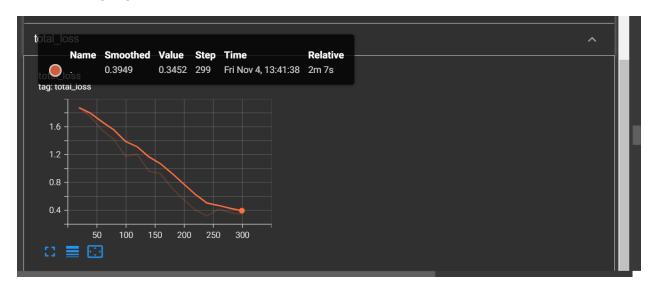
Detectron2 with mask RCNN

Detectron2 is Facebook AI Research's next generation library that provides state-of-the-art detection and segmentation algorithms. It is the successor of Detectron and maskrcnn-benchmark. It supports a number of computer vision research projects and production applications in Facebook.

- I've used pre-trained as well as custom trained(balloon dataset).
- Total no. of steps = 300
- Total loss = 0.3452
- AP= 73.119

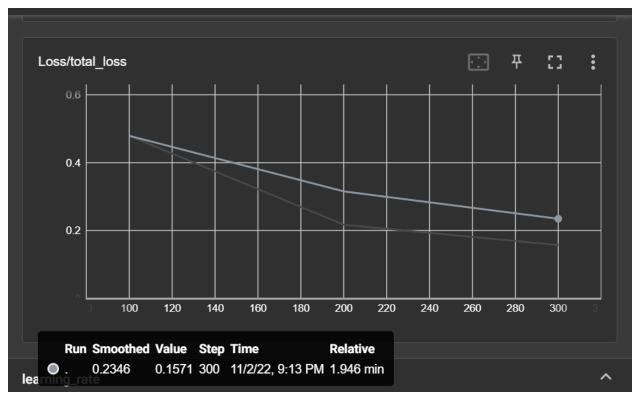


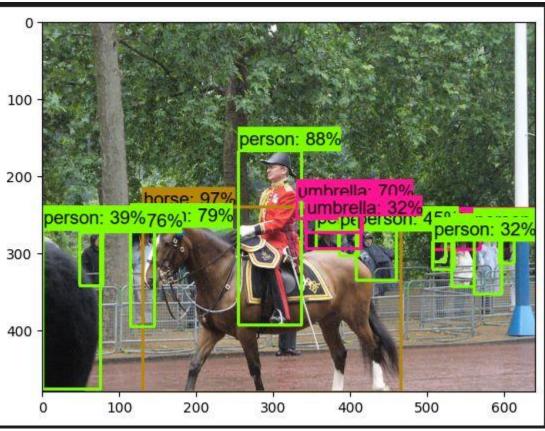


TFOD with mask RCNN

The TensorFlow Object Detection API is an open source framework built on top of TensorFlow that makes it easy to construct, train and deploy object detection models.

- Ran both pre-trained and custom dataset(balloon data) model
- Total step=300
- Total loss= 0.1571





Comparison

- For pre-trained model, Detectron2 is giving better accuracy than TFOD. Detectron2 predicts human as 100% human but TFOD predicts human as 88% human for same image.
- For custom trained model, TFOD provides lesser total loss than Detectron2 i.e. 0.1571 and 0.3452 for same number of steps and same dataset.
- Overall training of Detectron2 is less complex than TFOD due to the various built in modeules.