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t2 = time.time()

pred_bbox = [tf.reshape(x, (-1, tf.shape(x)[-1])) for x in pred_bbox]
pred_bbox = tf.concat(pred_bbox, axis=0)

bboxes = postprocess_boxes(
    pred_bbox, original_frame, input_size, score_threshold)
bboxes = nms(bboxes, iou_threshold, method='nms')

# extract bboxes to boxes (x, y, width, height), scores and names
boxes, scores, names = [], [], []
for bbox in bboxes:
    if len(Track_only) != 0 and NUM_CLASS[int(bbox[5])] in Track_only
or len(Track_only) == 0:
        boxes.append([bbox[0].astype(int), bbox[1].astype(int),
bbox[2].astype(
            int)-bbox[0].astype(int), bbox[3].astype(int)-
bbox[1].astype(int)])
        scores.append(bbox[4])
        names.append(NUM_CLASS[int(bbox[5])])

# Obtain all the detections for the given frame.
boxes = np.array(boxes)
names = np.array(names)
scores = np.array(scores)
features = np.array(encoder(original_frame, boxes))
detections = [Detection(bbox, score, class_name, feature) for bbox,
                score, class_name, feature in zip(boxes, scores, names,
features)]

# Pass detections to the deepsort object and obtain the track information.
tracker.predict()
tracker.update(detections)

# Obtain info from the tracks
tracked_bboxes = []
for track in tracker.tracks:
    if not track.is_confirmed() or track.time_since_update > 5:
        continue
    bbox = track.to_tlbr() # Get the corrected/predicted bounding box
    class_name = track.get_class() # Get the class name of particular
object
    tracking_id = track.track_id # Get the ID for the particular track
    # Get predicted object index by object name

```