The code 'my-detection_gqf.py' uses the deep learning library of NVIDIA Jetson platform for object detection. Firstly, it imported jetson.inference and jetson.utils modules for inference and image processing. Next, a pre-trained SSD-MobileNet-v2 model is used to initialize an object detection network, and a threshold parameter of 0.5 is set, which means that the detection result will only be considered valid when the confidence level of the detection is higher than 0.5.

Afterwards, the code loads an image file named 'image.png' from the disk and passes it to the initialized object detection network for analysis. After the detection process is completed, it returns a list containing all detected objects.



The code sets a specific category ID (1 in this example) to indicate the type of object of interest (human), and then traverses all detected objects to find objects that match that category ID. For each matched object, the code prints out relevant information, including category ID, confidence level, position coordinates of the bounding box (left, top, right, bottom), size of the bounding box (width and height), area covered by the bounding box, and coordinates of the center point of the bounding box.

Finally, the code defines the file path for the output image to be saved and names it 'saved_image.png'. Then, it uses the saveImage function of the jetson.utils module to save the annotated image (if any) to disk. In this way, the processed image is stored and the program ends accordingly.



The detection results are printed on the terminal:

[image] loaded 'image.png' (414x552, 3 channels)

-- ClassID: 1

-- Confidence: 0.964844 -- Left: 24.7884521484375 -- Top: 205.11328125 -- Right: 113.203125 -- Bottom: 455.77734375

-- Width: 88.415 -- Height: 250.664

-- Area: 22162.380859375 -- Center: (68.996, 330.445)

-- ClassID: 1

-- Confidence: 0.500488 -- Left: 115.62890625 -- Top: 219.12890625 -- Right: 177.6884765625 -- Bottom: 434.21484375

-- Width: 62.060 -- Height: 215.086 -- Area: 13348.140625

-- Center: (146.659, 326.672)

[image] saved 'saved_image.png' (414x552, 3 channels)



Link:

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