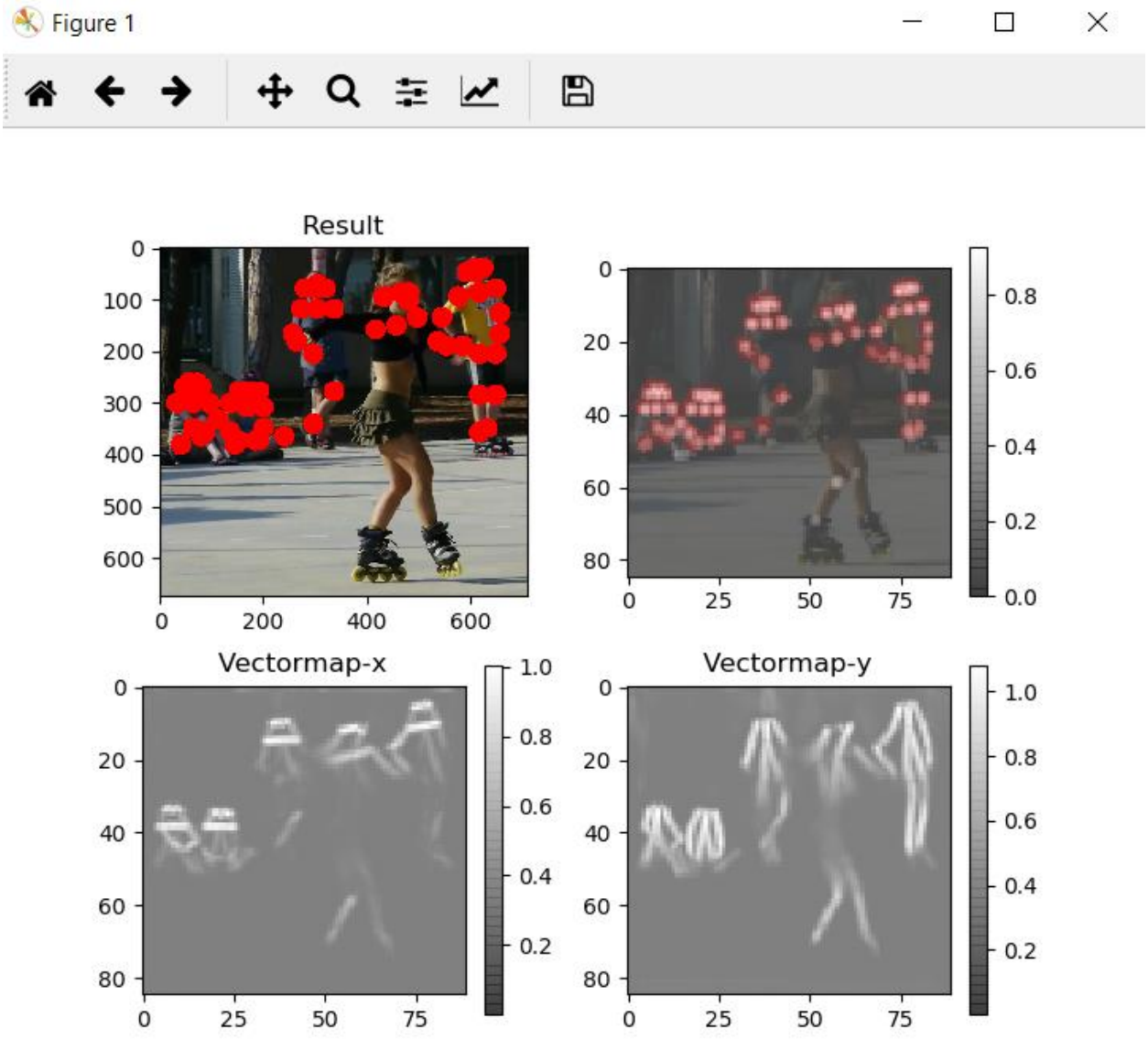
Homework-6 Deep Human Pose Recognition

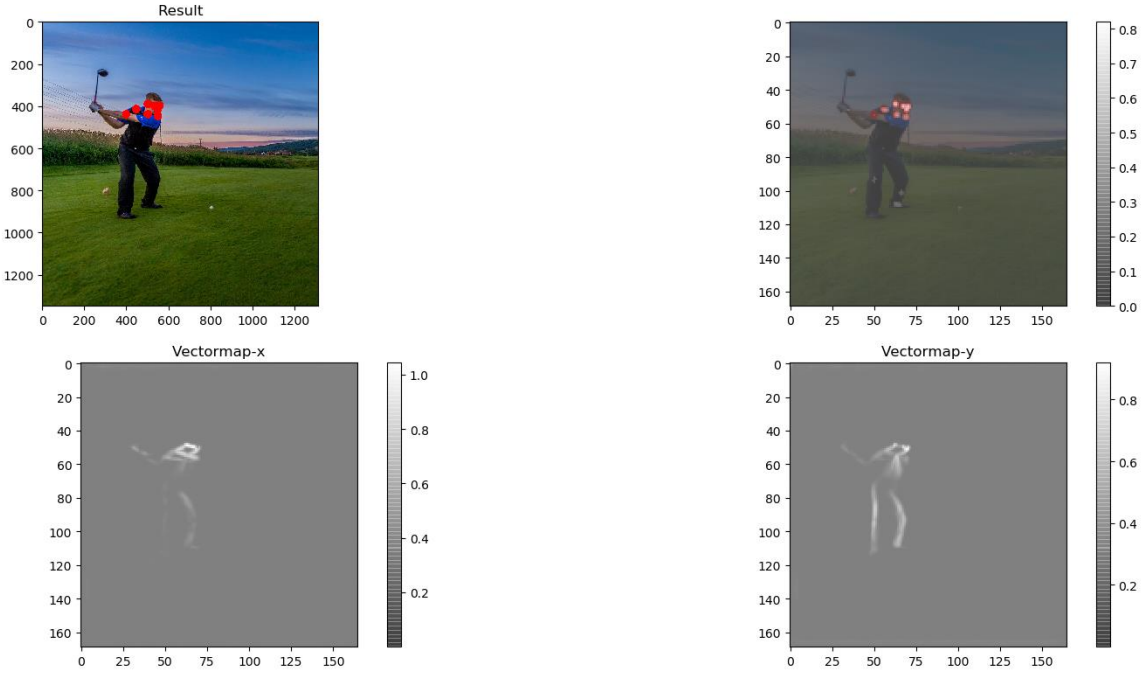
Credits: https://github.com/ildoonet/tf-pose-estimation --> Original Paper and Implementation on Git, We will need to understand the code here, and understand how this is implemented to run the code and go through the requirements to run it on Anaconda

PlaceHolder2

Generating the Heatmap and PAFmap for Image-ski.jpg



Golf.jpg



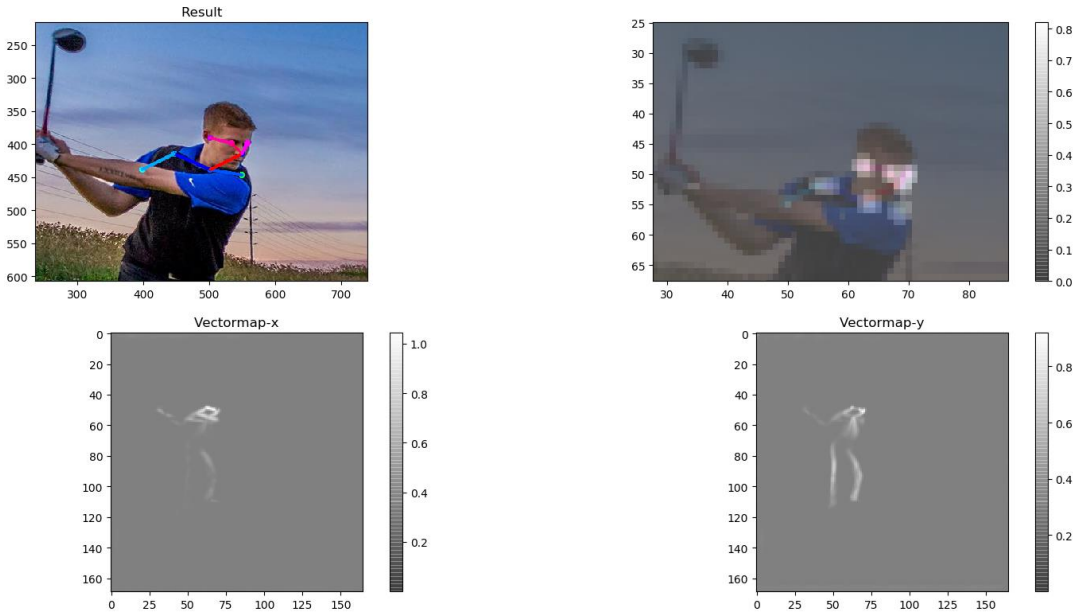
Placeholder3

```
def draw_humans(npimg, humans, imgcopy=False):
    if imgcopy:
        npimg = np.copy(npimg)
    image_h, image_w = npimg.shape[:2]
    centers = {}
    for human in humans:
        # draw point
        for i in range(common.CocoPart.Background.value):
            if i not in human.body_parts.keys():
                continue

            ########################placeholder start#######################
```

```
    body_part = human.body_parts[i]
    center=(int(body_part.x*image_w+0.5), int(body_part.y*image_h+0.5))
    centers[i]=center
    #cv2.circle(npimg, center, 3, (0,0,255), -1)
    cv2.circle(npimg, center, 3, common.CocoColors[i], thickness=2, lineType=8, shift=0)
########################placeholder start######################
# draw line
########################placeholder start######################
for pair_order, pair in enumerate(common.CocoPairsRender):
    if pair[0] not in human.body_parts.keys() or pair[1] not in human.body_parts.keys():
        continue
    cv2.line(npimg, centers[pair[0]], centers[pair[1]], common.CocoColors[pair_order], 3)
```

Drawing Lines :



SKI.png