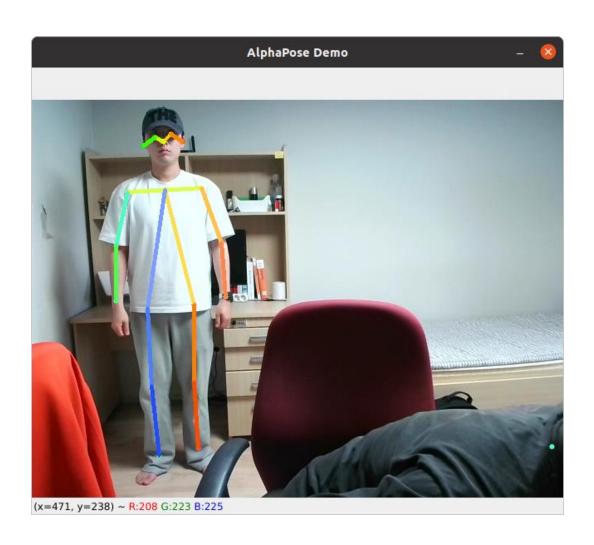
# AlphaPose

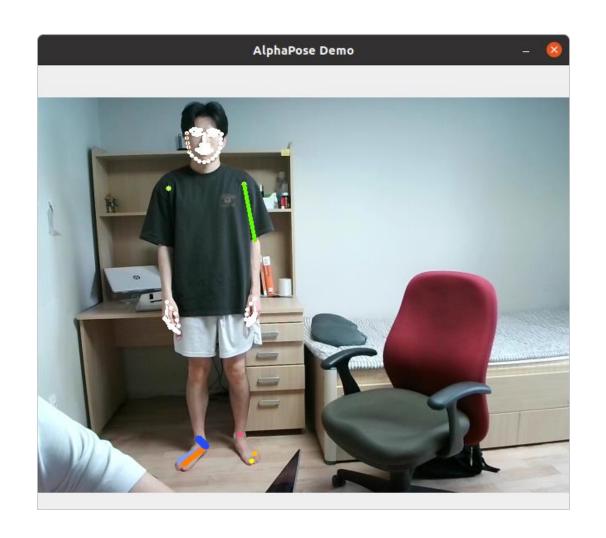
### MSCOCO 데이터셋 모델 성능

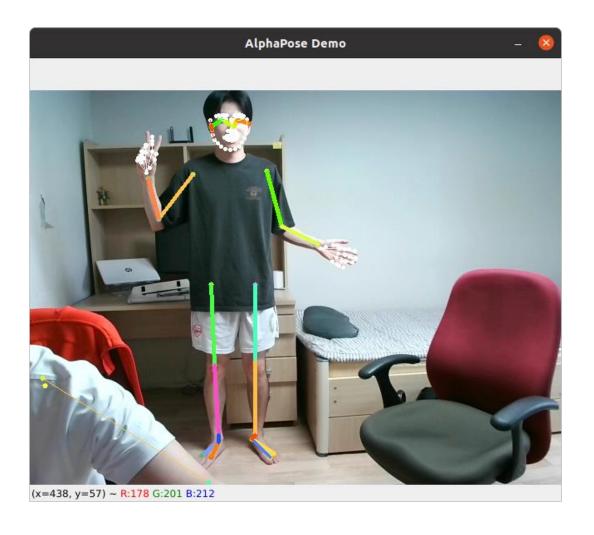


01 얼굴 손, 발 인식 미지원

02 인식하는 부분이 적은만큼 빠름

# Halpe 데이터셋 모델 성능

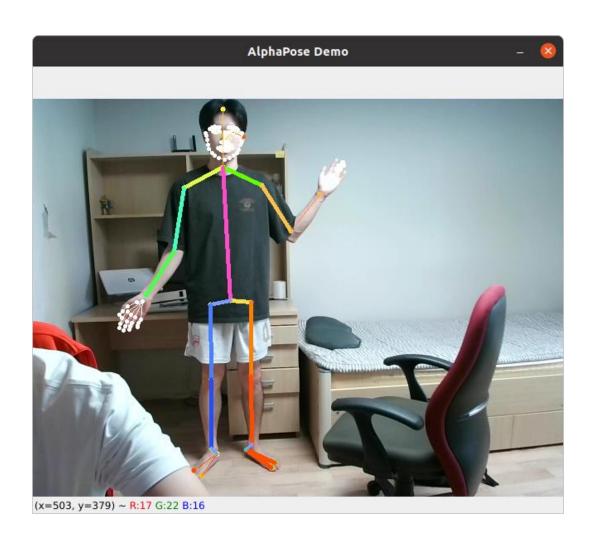


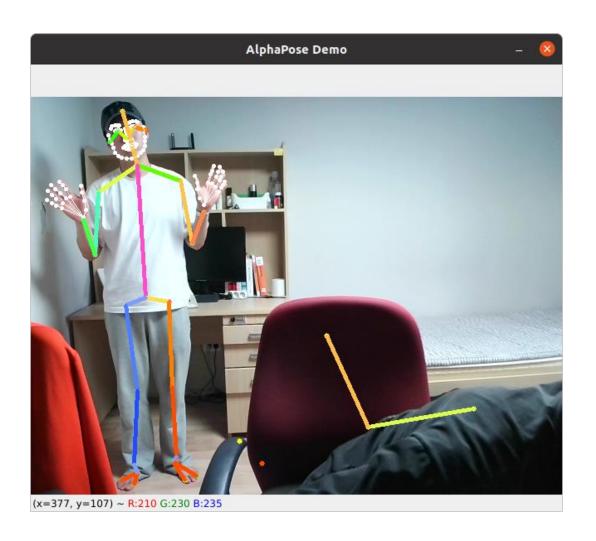


인식 성능이 좋지 않음

인식을 잘 되지만 몸통 인식 미지원

# COCO-WholeBody 데이터셋 모델 성능





두 모델 모두 손과 발, 그리고 얼굴까지 지원이 잘 됨

## Multi\_Domain 데이터셋 모델 성능



| Fast Pose<br>(DCN) | ResNet50<br>- dcn | 256x192 | Combined (10 hand weight) | 49.8 | 10.35<br>iter/s | Google Baidu(code: | cfg | 136 |
|--------------------|-------------------|---------|---------------------------|------|-----------------|--------------------|-----|-----|
|--------------------|-------------------|---------|---------------------------|------|-----------------|--------------------|-----|-----|



| Fast Pose<br>(DCN) | ResNet50<br>- dcn | YOLOv3 | 256x192 | Combined |  | 13.88<br>iter/s | Google<br>Baidu(code:<br>6kwr) | cfg | 68 (no<br>face) |  |
|--------------------|-------------------|--------|---------|----------|--|-----------------|--------------------------------|-----|-----------------|--|
|--------------------|-------------------|--------|---------|----------|--|-----------------|--------------------------------|-----|-----------------|--|













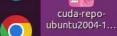


















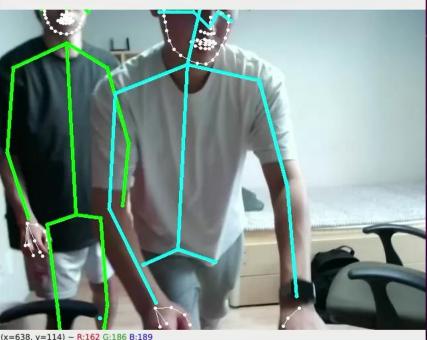
hello



hello\_x86







o401@o401-desktop: ~/Desktop/AlphaPose Q ≡ – □

utdir examples/res --vis --vis fast --pose track --webcam 0 /hpme/o401/.local/lib/python3.8/site-packages/torchvision/models/ utils.py:208: UserWarning: The parameter 'pretrained' is deprecated since 0.13 and may be remo ved in the future, please use 'weights' instead.

warnings.warn(

/home/o401/.local/lib/python3.8/site-packages/torchvision/models/\_utils.py:223: UserWarning: Arguments other than a weight enum or `None` for 'weights' are depr ecated since 0.13 and may be removed in the future. The current behavior is equi valent to passing `weights=ResNet50 Weights.IMAGENET1K V1`. You can also use `we ights=ResNet50\_Weights.DEFAULT` to get the most up-to-date weights.

warnings.warn(msg)

Loading pose model from pretrained\_models/multi\_domain\_fast50\_dcn\_combined\_256x1 92.pth...

Loading YOLO model..

loading reid model from trackers/weights/osnet\_ain\_x1\_0\_msmt17\_256x128\_amsgrad\_e p50\_lr0.0015\_coslr\_b64\_fb10\_softmax\_labsmth\_flip\_jitter.pth...

Starting webcam demo, press Ctrl + C to terminate...

Oit [00:00, ?it/s]/home/o401/Desktop/AlphaPose/trackers/\_\_init\_\_.py:19: UserWarn ing: Creating a tensor from a list of numpy.ndarrays is extremely slow. Please c onsider converting the list to a single numpy.ndarray with numpy.array() before converting to a tensor. (Triggered internally at ../torch/csrc/utils/tensor\_new. cpp:245.)

new\_hm = torch.Tensor(new\_hm).to(args.device)

1319it [02:24, 8.08it/s]



























hello.c

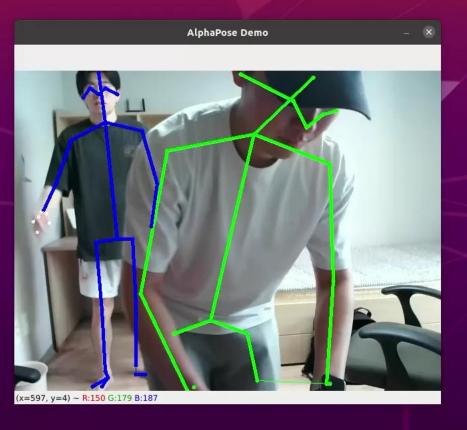


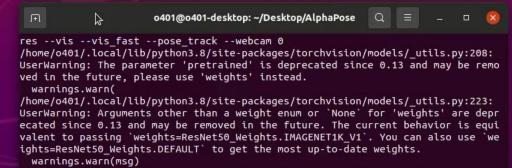
hello



hello\_x86







Loading pose model from pretrained\_models/noface\_fast50\_dcn\_combined\_256x192.pth ...
Loading YOLO model..

loading reid model from trackers/weights/osnet\_ain\_x1\_0\_msmt17\_256x128\_amsgrad\_e p50\_lr0.0015\_coslr\_b64\_fb10\_softmax\_labsmth\_flip\_jitter.pth... Starting webcam demo, press Ctrl + C to terminate...

Oit [00:00, ?it/s]/home/o401/Desktop/AlphaPose/trackers/\_\_init\_\_.py:19: UserWarn ing: Creating a tensor from a list of numpy.ndarrays is extremely slow. Please c onsider converting the list to a single numpy.ndarray with numpy.array() before converting to a tensor. (Triggered internally at ../torch/csrc/utils/tensor\_new.cpp:245.)

new\_hm' = torch.Tensor(new\_hm).to(args.device)
666it [01:06, 9.28it/s]



#### 좌표값 확인

```
ples > res > {} alphapose-results.json > {} 0 > [ ] keypoints > # 33
                   QW...
                             Save
 Open
                                                               > 766.96
                                                                                  Aa <u>ab</u> * 1 of 1
                                                                                                     \wedge \downarrow = \times
 1 {'imgname': '4.jpeg', 'result': [{'keypoints':
                                                           [{"image id": "4.jpeg", "category id": 1,
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Disin Toyt - Tab Width: 0 -
```

#### 결론

1

데이터셋들의 모델들이 대부분 준수한 성능을 보여줌

2

사람이 추가될 수록 성능이 안 좋아짐

3

출력된 좌표값을 어떻게 활용할 것인지 알아야 함