

7.1

Wednesday, 23 September 2020 4:13 PM

Hypothesis 1: Research on how other ppl setup their cameras. Maybe have to do with setup?

Result: NAH, didn't change a thing for the circles in 5.2

Chair legs to seat = 44cm

Box L = 34.3cm

Box W = 22.7cm

Box H = 13.1cm

Book H = 2.5cm

Tape x 2 = 9.7cm

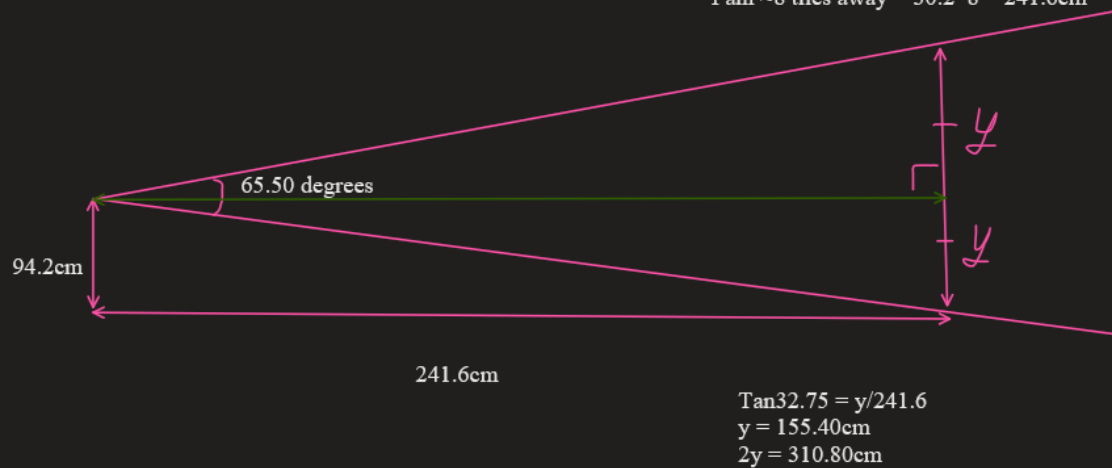
Realsense box H to middle of camera = 5.1cm

Tripod H = 12.7cm

Total : $44+22.7+9.7+5.1+12.7 = 94.2$ cm

1 tile ~ 30.2cm

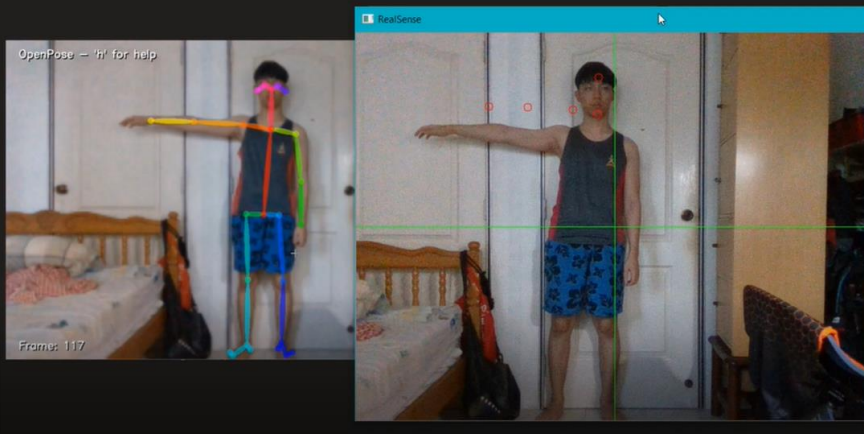
I am ~8 tiles away = $30.2*8 = 241.6$ cm



Hypothesis 2: Something wrong with the keypoint output?

- 5) After tweaking my setup, decide to try the getting 2D keypoints and then see if it fit in Openpose (23/9/20)

```
"part_candidates":{
  "0": [300.212,55.2535,0.881107,477.258,188.246,0.0792742,193.235,2
  "1": [299.205,100.207,0.87531,188.302,221.246,0.0985572,476.249,22
  "2": [268.245,95.242,0.761356,188.244,221.255,0.124923,453.243,224
  "3": [212.287,92.2804,0.744521,451.284,292.25,0.0539178],
  "4": [164.236,91.1933,0.81796],
  "5": [327.238,106.212,0.750223,191.255,221.27,0.0864684,505.242,22
  "6": [333.232,159.249,0.756963,451.249,301.266,0.0556944],
  "7": [333.274,207.242,0.782274,452.221,317.237,0.0606706],
  "8": [291.232,196.265,0.651239,465.253,276.251,0.0657376,198.237,3
  "9": [271.237,196.238,0.593739,455.251,277.247,0.0669751,199.24,30
  "10": [273.222,270.245,0.76392,457.261,315.25,0.0646889,474.229,35
  "11": [272.247,343.237,0.726156,476.232,362.233,0.0955604],
  "12": [308.3,197.244,0.620967,199.252,300.257,0.110638,464.25,314.
  "13": [313.224,271.254,0.744218,460.239,316.252,0.0677139,472.235,
  "14": [311.234,340.287,0.708007,476.236,358.262,0.141127],
  "15": [292.276,50.2579,0.87325,473.258,183.25,0.0579872,189.264,20
  "16": [307.269,51.1955,0.909514,482.247,183.243,0.0555654,194.226,
  "17": [284.208,57.2232,0.882142,188.217,204.209,0.103162],
  "18": [316.236,58.2176,0.895772],
  "19": [316.271,354.248,0.300372,473.251,370.234,0.0843462],
  "20": [323.215,351.238,0.369275,478.248,372.242,0.0734836],
  "21": [307.282,347.221,0.580065,477.251,361.257,0.132435],
  "22": [256.253,355.281,0.321718],
  "23": [253.264,351.26,0.347633],
  "24": [276.229,348.248,0.657434,478.252,362.249,0.0908511]]}
```



Idk why is the points so squashed...

- If use keypoint_scale 0:

```
"part_candidates":{
  "0": [653.451,116.603,0.854088,389.051,409.026,0.249159,887.768,525.223,0.0774305],
  "1": [649.37,198.852,0.895706,377.064,441.105,0.230098,387.018,507.201,0.207688,925.802,553.292,0.114367,395.06,615.365,0.0942709],
  "2": [587.379,190.733,0.755185,373.441,118,0.240662,373.022,505.211,0.140997,907.832,557.269,0.113833],
  "3": [489.124,194.723,0.755655,377.005,477.169,0.0902719,375.018,551.27,0.0556298,373.002,563.266,0.0557254,905.697,613.36,0.0517106],
  "4": [379.047,186.828,0.733163,399.051,497.183,0.0578041,363.074,505.215,0.0541483,373.018,575.298,0.0662661,909.732,647.439,0.0515268],
  "5": [711.396,210.789,0.780413,387.054,441.181,0.196326,391.075,507.226,0.155193,909.784,553.321,0.147137,415.07,619.383,0.0561139],
  "6": [727.392,310.967,0.798284,406.984,499.194,0.0643248,409.001,553.242,0.0596486,903.792,621.353,0.135634],
  "7": [727.534,403.039,0.807182,405.056,503.154,0.0676743,407.087,599.322,0.0558625,907.761,647.388,0.0911129],
  "8": [643.378,393.014,0.619365,397.062,599.344,0.176527,951.793,661.423,0.0722647],
  "9": [603.365,391.055,0.59735,395.049,597.333,0.136986,937.825,653.424,0.0808133],
  "10": [615.367,537.297,0.826559,389.034,653.406,0.0605338,439.052,661.405,0.0628266],
  "11": [623.34,681.449,0.698824,951.797,711.486,0.0765097],
  "12": [679.442,393.06,0.621121,387.023,525.251,0.0712428,407.048,599.333,0.124191,925.821,651.422,0.0602753],
  "13": [665.473,539.285,0.806561,379.013,653.414,0.0538723,441.101,665.39,0.0785348],
  "14": [661.378,683.444,0.722603,951.818,711.438,0.0611007],
  "15": [643.346,102.62,0.875006,381.066,406.964,0.263502],
  "16": [667.439,102.711,0.890721,390.947,406.959,0.18161,891.757,517.192,0.0683591],
  "17": [619.38,116.618,0.880512,375.068,409,0.261117],
  "18": [683.43,118.555,0.855434,392.982,409.008,0.0711452,391.048,483.158,0.0547096,899.77,515.224,0.085326],
  "19": [669.429,713.489,0.451219],
  "20": [681.457,709.474,0.526532],
  "21": [649.445,695.396,0.64189,453.062,709.496,0.0604413,951.796,711.489,0.0588789],
  "22": [631.312,707.5,0.544826,967.777,713.58,0.0646027],
  "23": [615.304,703.49,0.543546],
  "24": [629.361,691.436,0.54867,951.775,711.492,0.0762659]]}
```

- If the x and y axis exceeds the 640 x 480 resolution
- Same also if scaled to 2, also exceeds the 640 x 480 resolution

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`keypoint_scale, 0`, "Scaling of the (x,y) coordinates of the final pose data array, i.e., the scale of the (x,y)"" coordinates that will be saved with the `'write_json'` & `'write_keypoint'` flags."" Select
`'0'` to scale it to the original source resolution;
`'1'` to scale it to the net output"" size (set with `'net_resolution'`);
`'2'` to scale it to the final output size (set with"" `'resolution'`);
`'3'` to scale it in the range [0,1], where (0,0) would be the top-left"" corner of the image, and (1,1) the bottom-right one;
`'4'` for range [-1,1], where"" (-1,-1) would be the top-left corner of the image, and (1,1) the bottom-right one.
 Non"" related with `'scale_number'` and `'scale_gap'`."

Still dk why...

