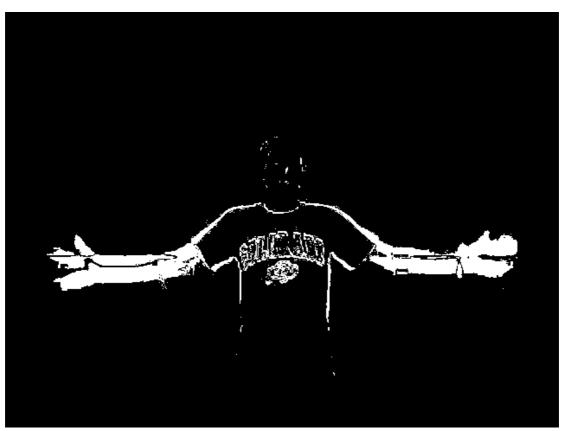


ps7-1-a-1.png



ps7-1-a-2.png



ps7-1-a-3.png



ps7-1-b-1.png







ps7-1-b-3.png

## Ps7 Computer Vision Jake Fund

903138567

text response b:  $\tau$  was set to 15 in theses picture, but originally it was set to 5 buy gay worse results (That is more motion in the head was shown)

2a text out put: central mean =

1	0	0
0	1	0
0	0	1

scaled version =

1	0	0
0	0.88888888888889	0.1111111111111111
0.111	0	0.8888888888888

note that I used a scaling variant of my own which normalized all the instances values by the maximum of the feature the value pertains to.

## 2b. text response:

the central limit method was used and found found perfect matches.

```
Subject 1 =
```

1	0	0
0	1	0
0	0	1

1	0	0
0	1	0
0	0	1

## Subject 3 =

1	0	0
0	1	0
0	0	1

## averaged =

1	0	0
0	1	0
0	0	1

I used the regular Euclidean difference sum but I had to change my  $\tau$  to get better results. It appeared that the learning algorithm was very sensitive to the  $\tau$  factor, 15 was just right, any more or less did not give perfect results.