HW3: Problem 1
Ian Dover

1 Part 1

The relative error for the core tensor is: 0.054192001668860484.

2 Part 2

Below is the relative error for each threshold:
percentiles,relative_errors
0.1,0.11784678690348407
0.2,0.0919386427161798
0.3,0.07731798652224332
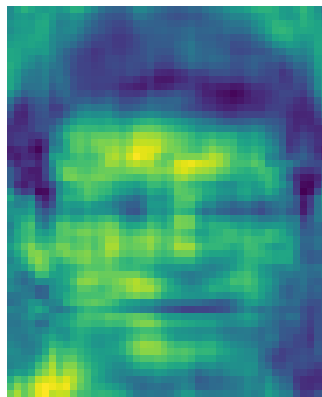0.4,0.0679448947981171
0.5,0.06179237434782138

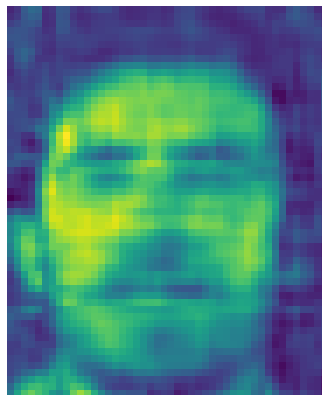Figure 1: Percentile = 0.1; Image 5

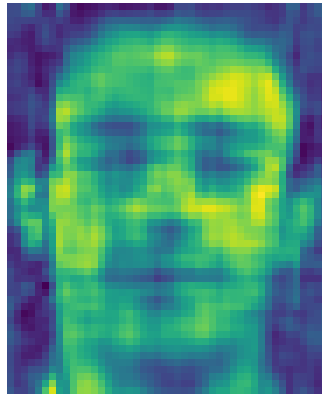Figure 2: Percentile = 0.1; Image 10
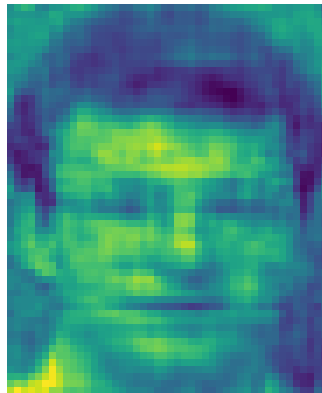
Figure 3: Percentile = 0.1; Image 15
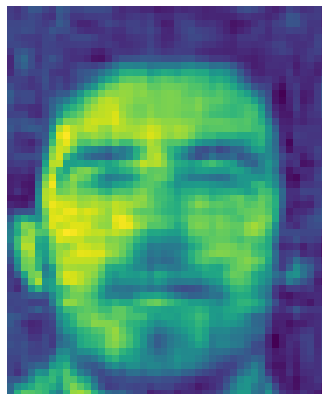

Figure 4: Percentile = 0.2; Image 5

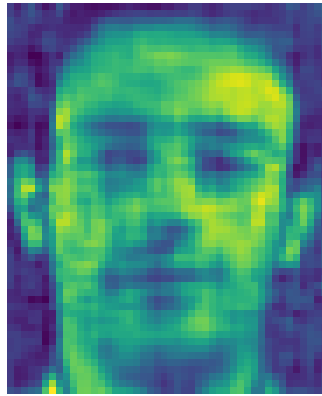Figure 5: Percentile = 0.2; Image 10
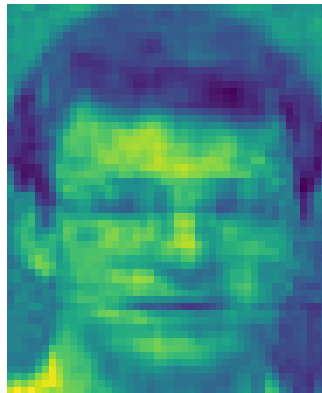
Figure 6: Percentile = 0.2; Image 15
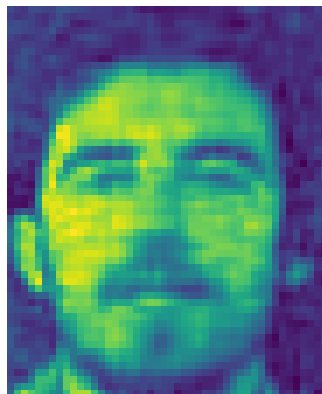

Figure 7: Percentile = 0.3; Image 5

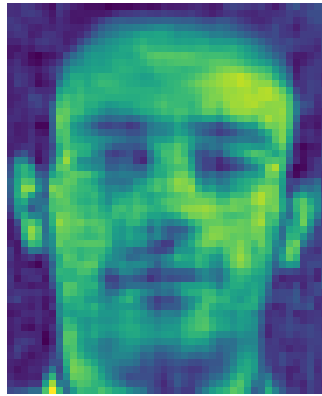Figure 8: Percentile = 0.3; Image 10
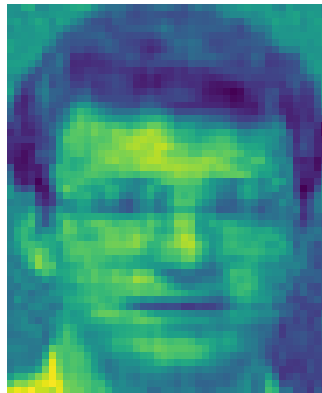
Figure 9: Percentile = 0.3; Image 15

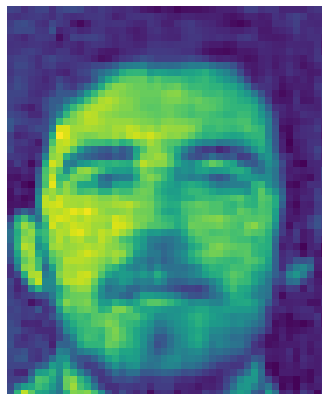Figure 10: Percentile = 0.4; Image 5

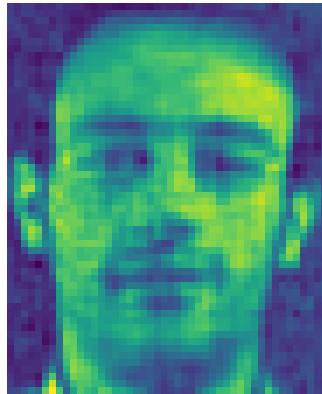Figure 11: Percentile = 0.4; Image 10
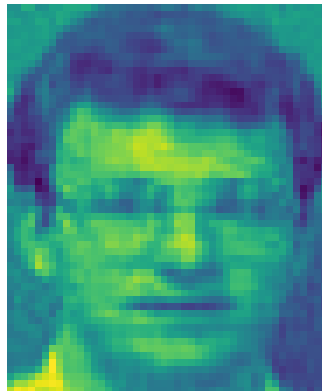
Figure 12: Percentile = 0.4; Image 15
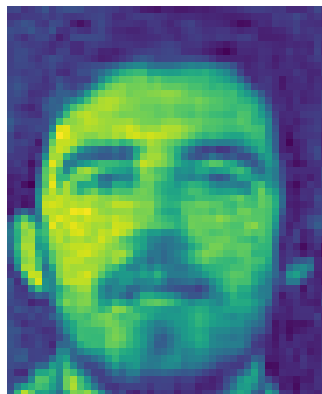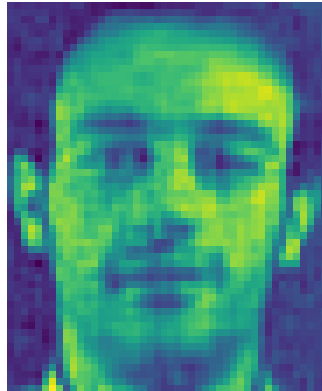

Figure 13: Percentile = 0.5; Image 5

Figure 14: Percentile = 0.5; Image 10

Figure 15: Percentile = 0.5; Image 15