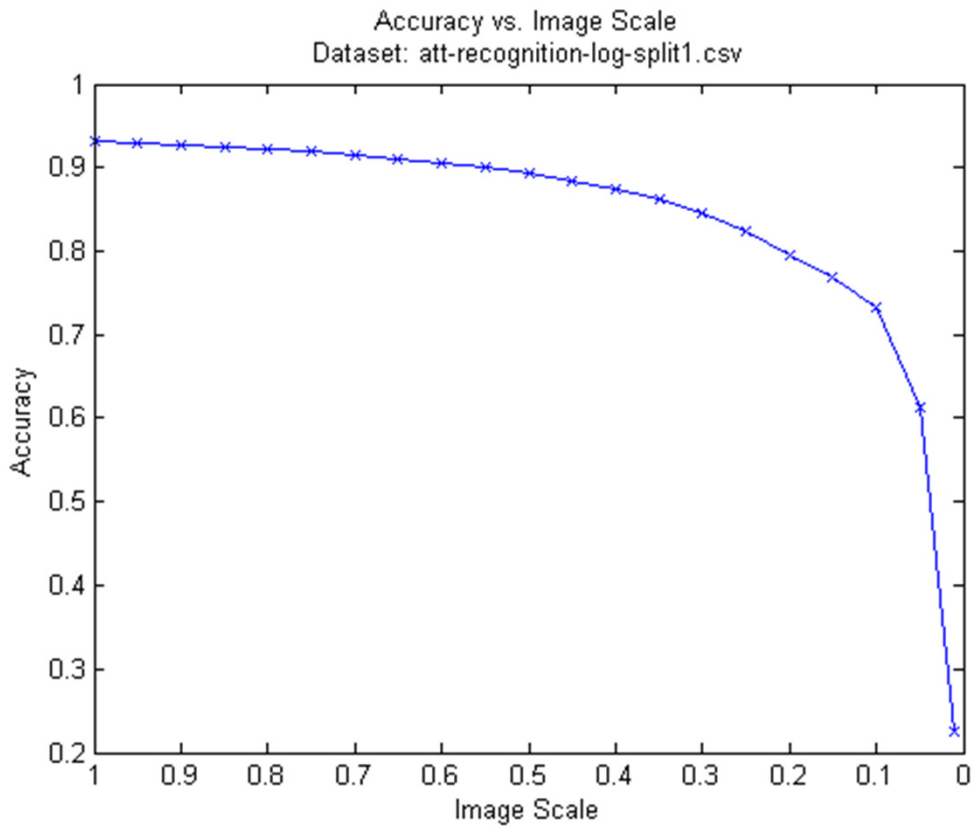
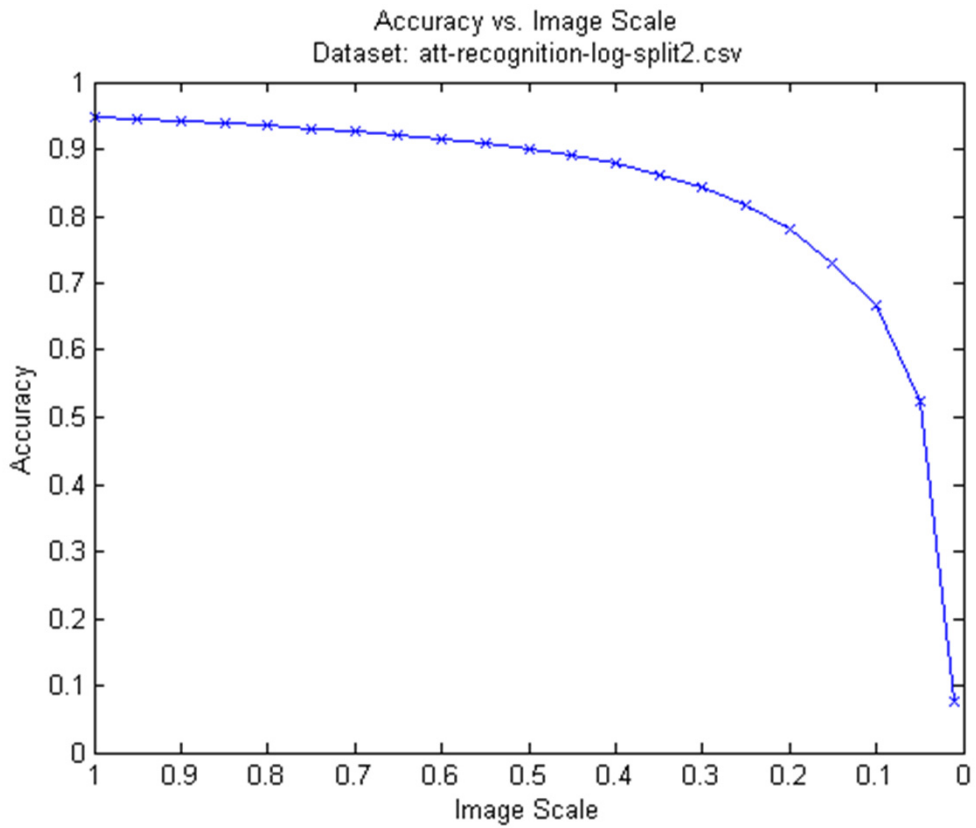
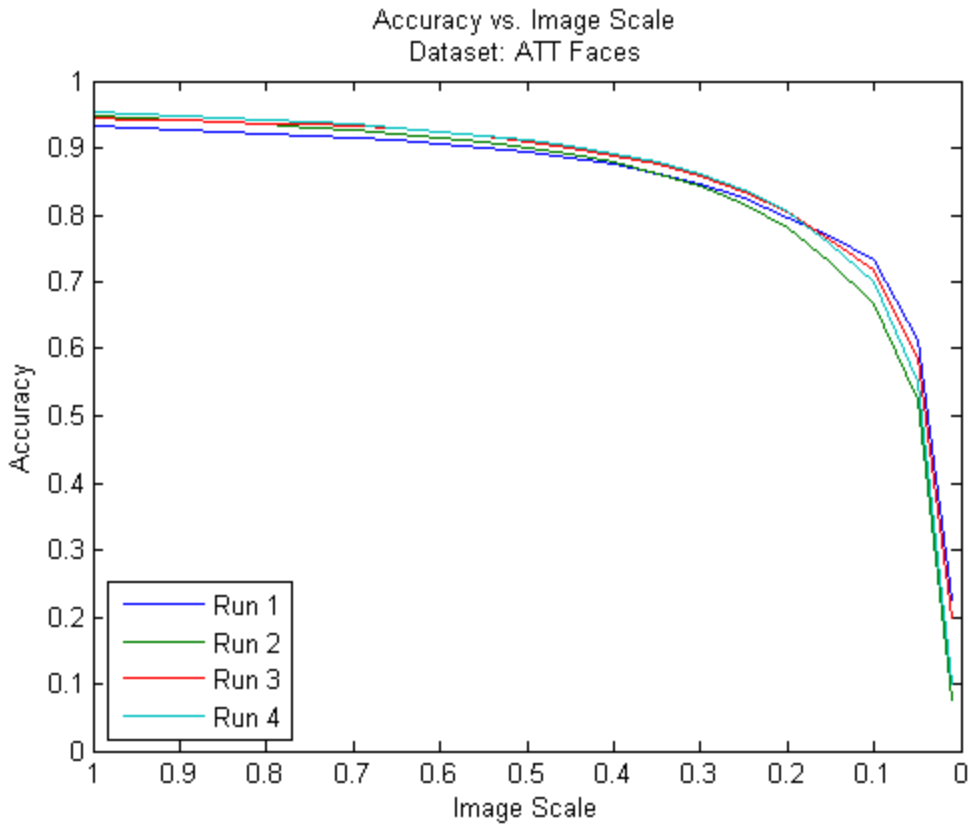
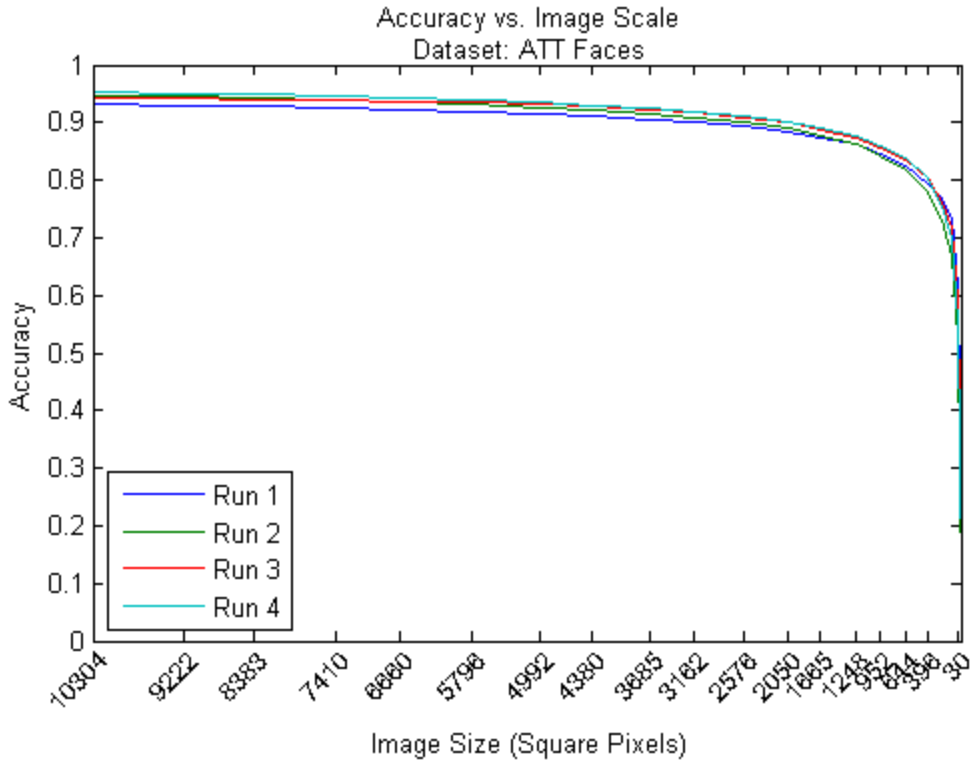
AT&T Faces

- 40 Subjects
- 10 Faces Each
- 400 Total Images
- Model building time: ~60s
- At each scale, each dataset trained on 9 faces per subject and tested on one.
- Accuracy = # Correct (out of 40) / 40


Accuracy vs. Image Scale
Dataset: att-recognition-log-split1.csv
Accuracy
Image Scale
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0


Accuracy vs. Image Scale
Dataset: att-recognition-log-split2.csv
Accuracy
Image Scale
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0

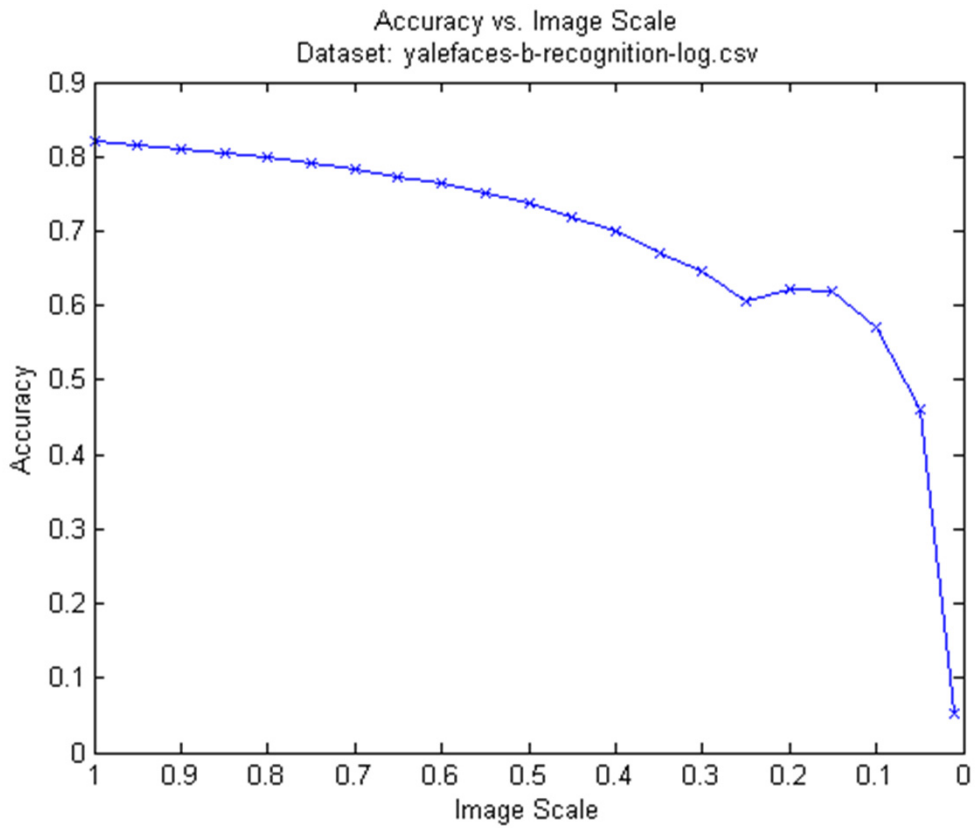

Accuracy vs. Image Scale
Dataset: ATT Faces
Accuracy
Image Scale
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Run 1
Run 2
Run 3
Run 4

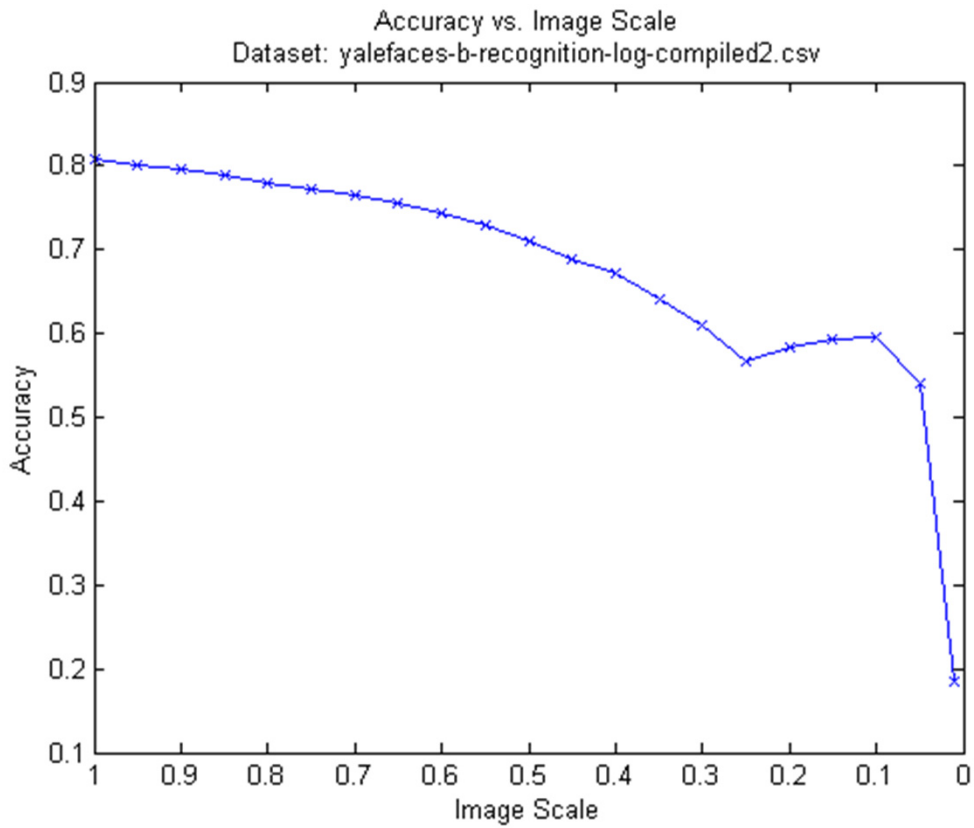

Accuracy vs. Image Scale
Dataset: ATT Faces
Accuracy
Image Size (Square Pixels)
Run 1
Run 2
Run 3
Run 4
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
10304
9222
8383
7410
6660
5796
4992
4330
3685
3162
2576
2050
1665
1248
952
644
396
30

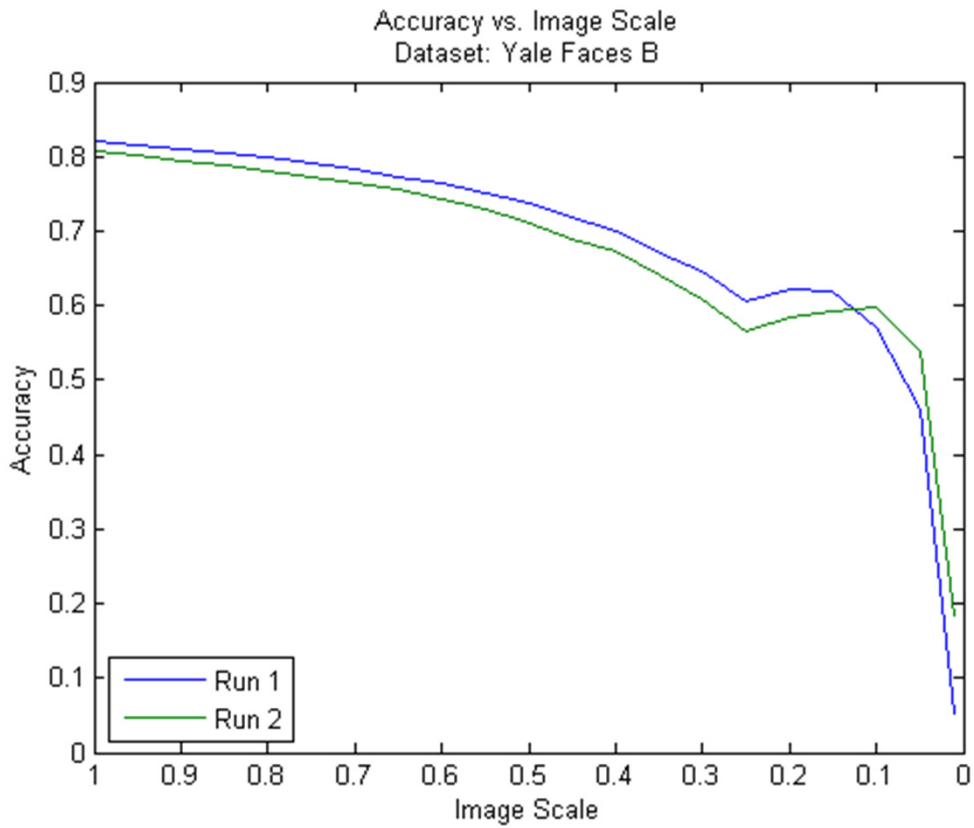
Yale Faces B

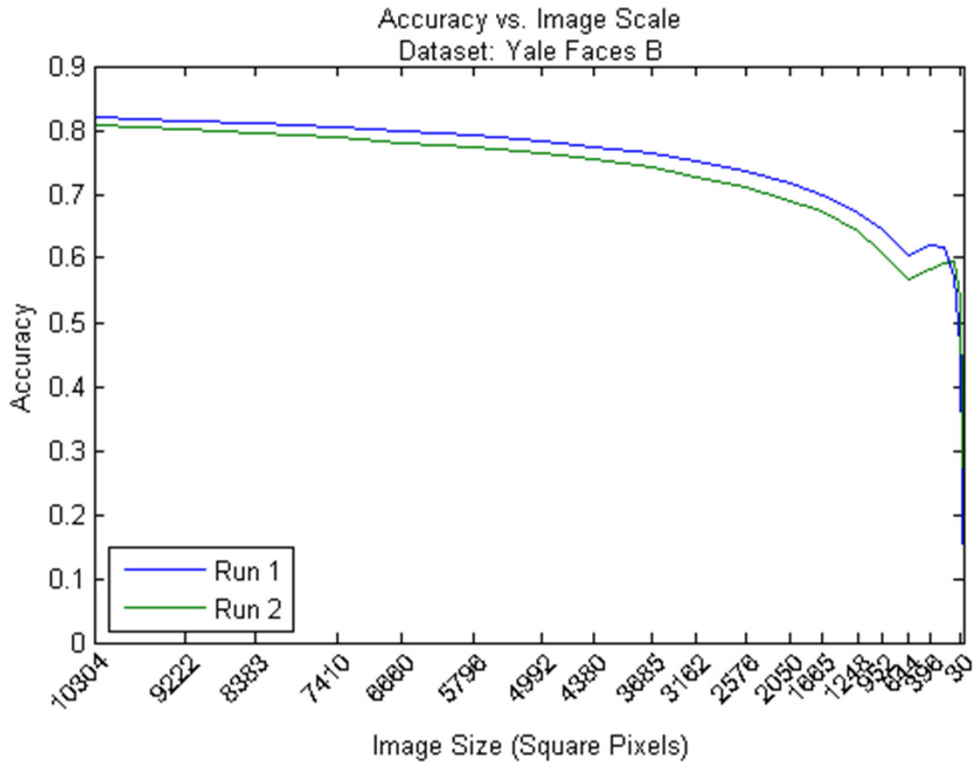
- 39 Subjects
- 63-64 Images Each
- 2414 Total Images
- Model building time: ~880 seconds
- At each scale, each dataset trained on 62* faces per subject and tested on one.
- Accuracy = # Correct (out of 62*) / 62*

* 62-63 depending on the subject

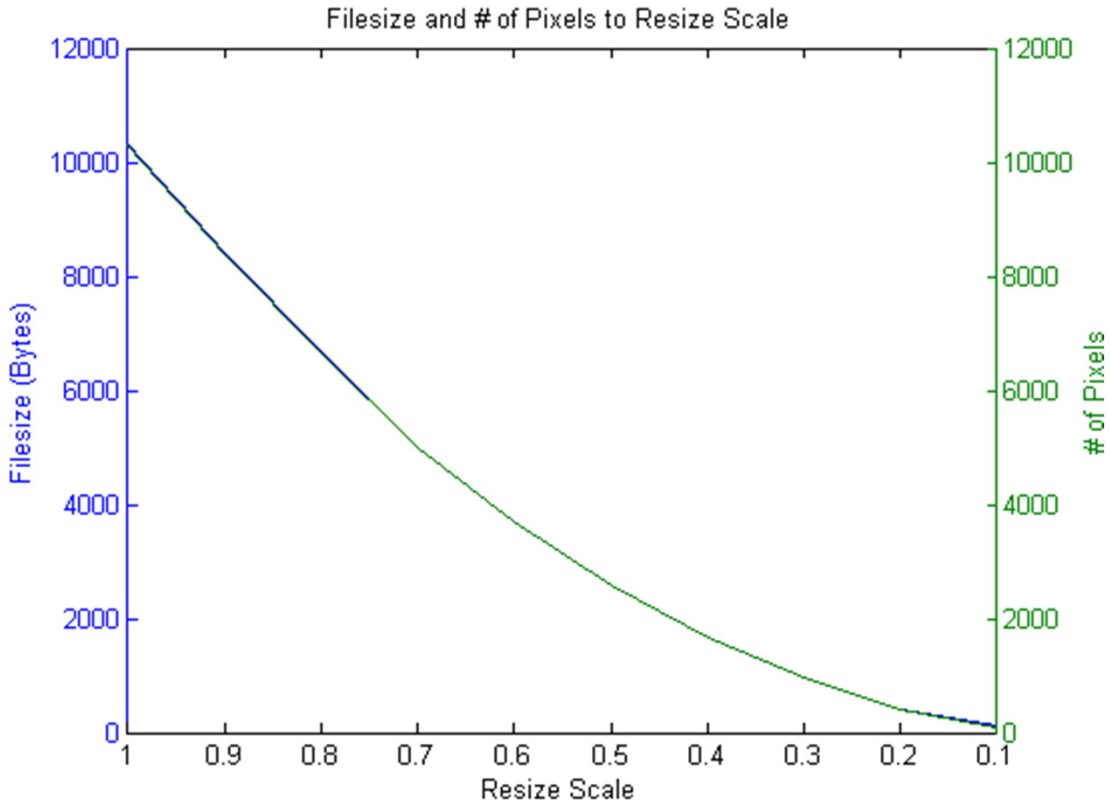

Accuracy vs. Image Scale
Dataset: yalefaces-b-recognition-log.csv
Accuracy
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Image Scale


Accuracy vs. Image Scale
Dataset: yalefaces-b-recognition-log-compiled2.csv
Accuracy
Image Scale
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0


Accuracy vs. Image Scale
Dataset: Yale Faces B
Accuracy
Image Scale
Run 1
Run 2
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0


Accuracy vs. Image Scale
Dataset: Yale Faces B
Accuracy
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Run 1
Run 2
10304
9222
8383
7410
6660
5796
4992
4330
3885
3162
2576
2050
1665
1248
952
644
396
30
Image Size (Square Pixels)

Resize Scale	1.0	0.9	0.8	0.7	0.6	0.5	0.4	0.3	0.2	0.1
Size (Bytes)	10318	8397	6673	5005	3698	2589	1678	965	409	111
Images Dimension	92×112	83×101	74×90	64×78	55×67	46×56	37×46	28×34	18×22	9×11


Filesize and # of Pixels to Resize Scale
Filesize (Bytes)
# of Pixels
Resize Scale
12000
10000
8000
6000
4000
2000
0
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1