

AAM Data Report

Generated by the AAM-API
[c:/users/mbs/studies/hands/model2_notangent]

Mikkel B. Stegmann [mbs@imm.dtu.dk]

January 18, 2002

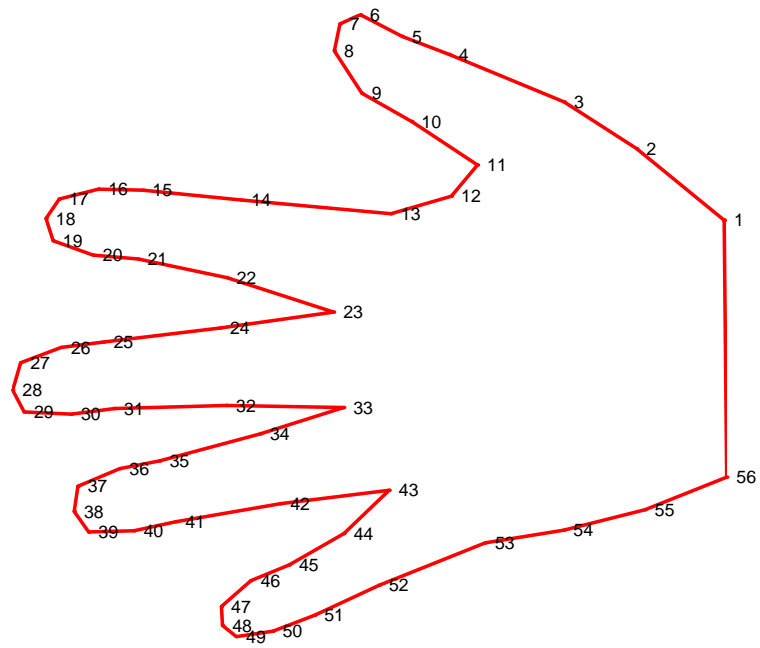


Figure 1: Mean shape.

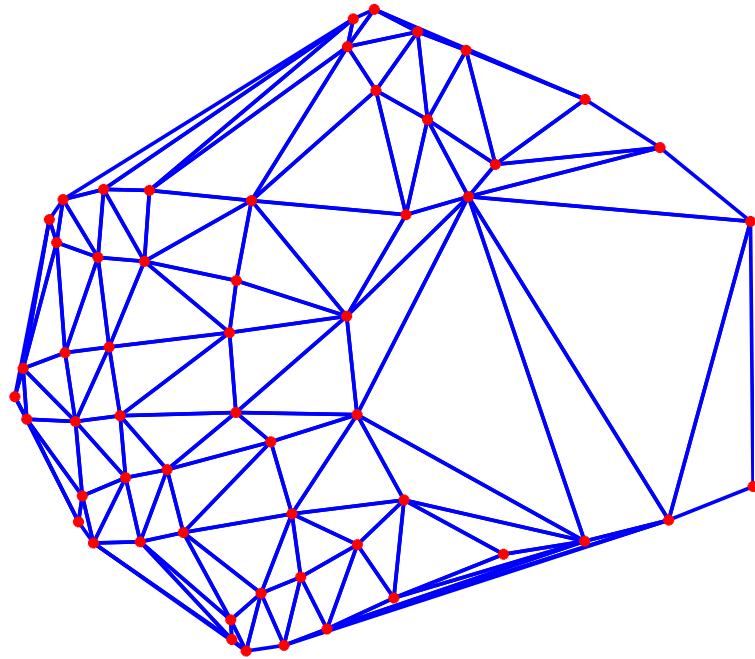


Figure 2: Delaunay triangulation of the mean shape.

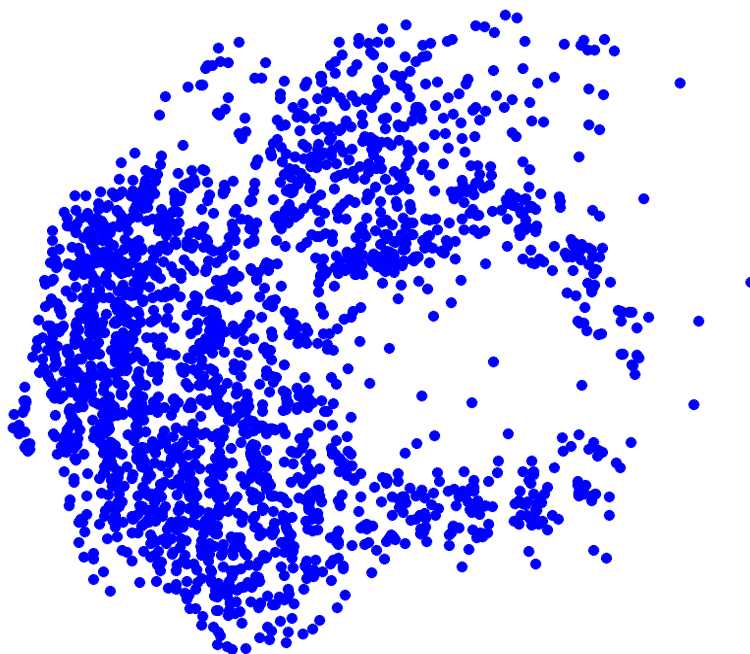


Figure 3: Point cloud of the unaligned annotations.

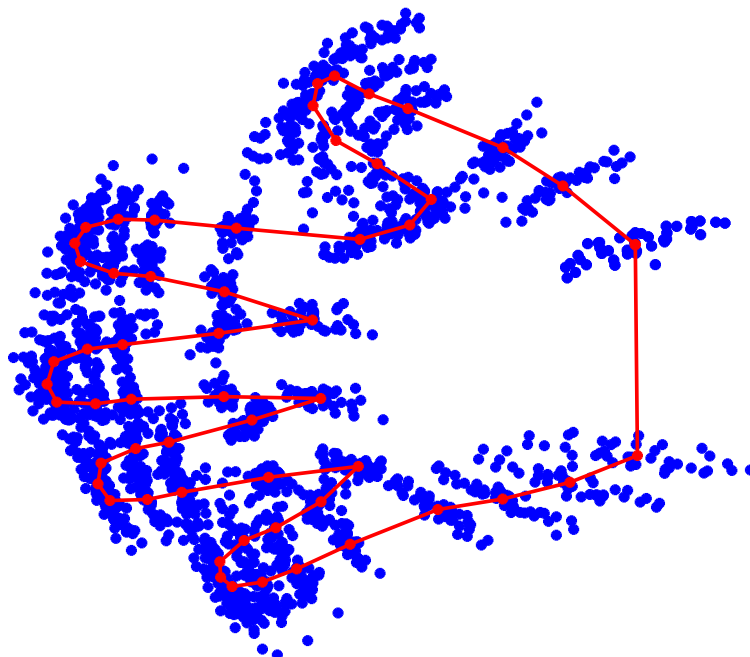


Figure 4: Point cloud of the aligned annotations with mean shape fully drawn in red.

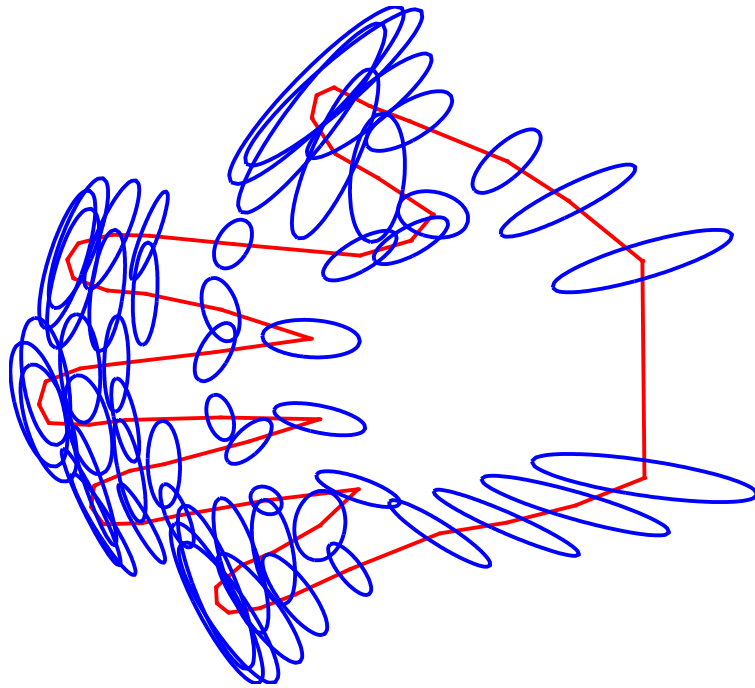


Figure 5: Independent principal component analysis of each model point.

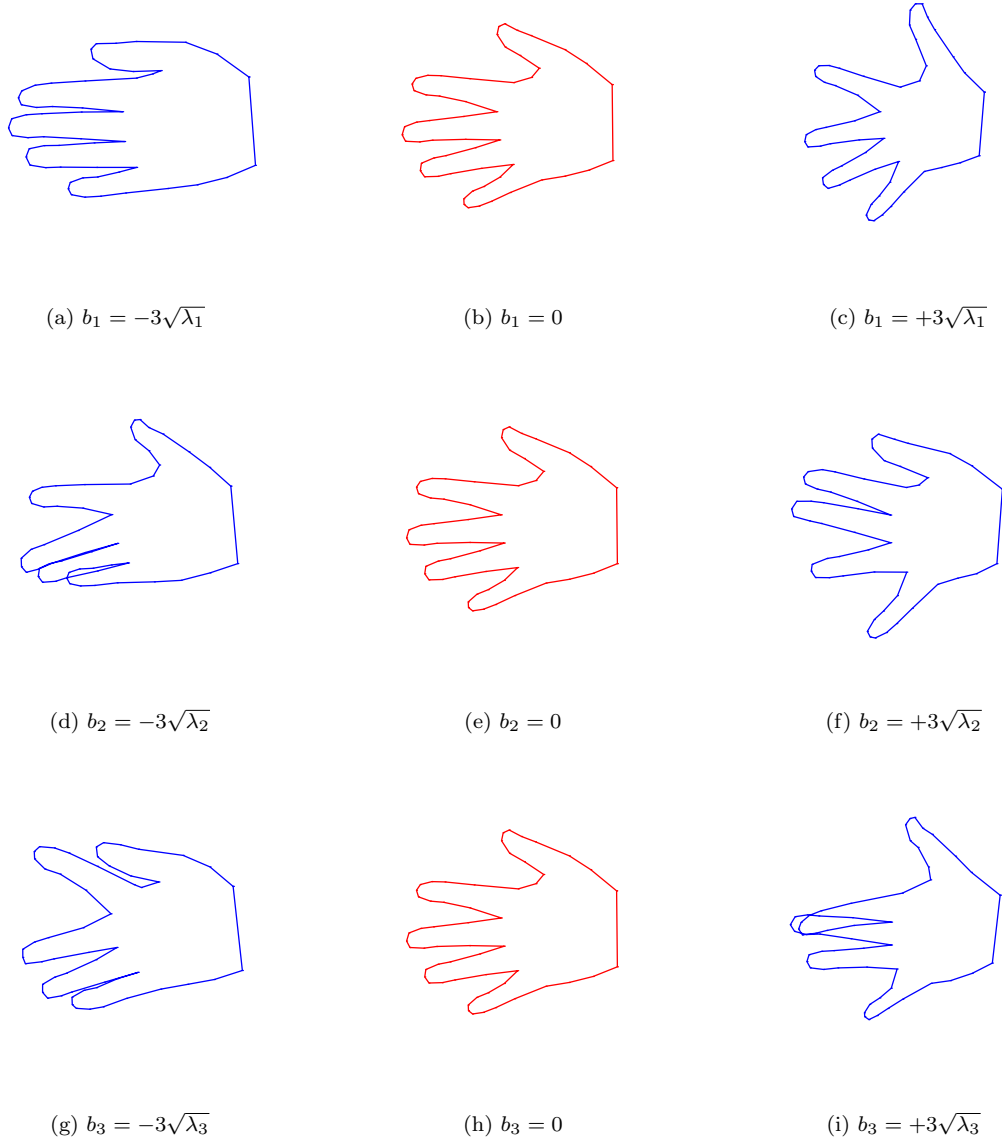


Figure 6: Mean shape deformation using 1st, 2nd and 3rd principal mode. $b_i = -3\sqrt{\lambda_i}$, $b_i = 0$, $b_i = 3\sqrt{\lambda_i}$.

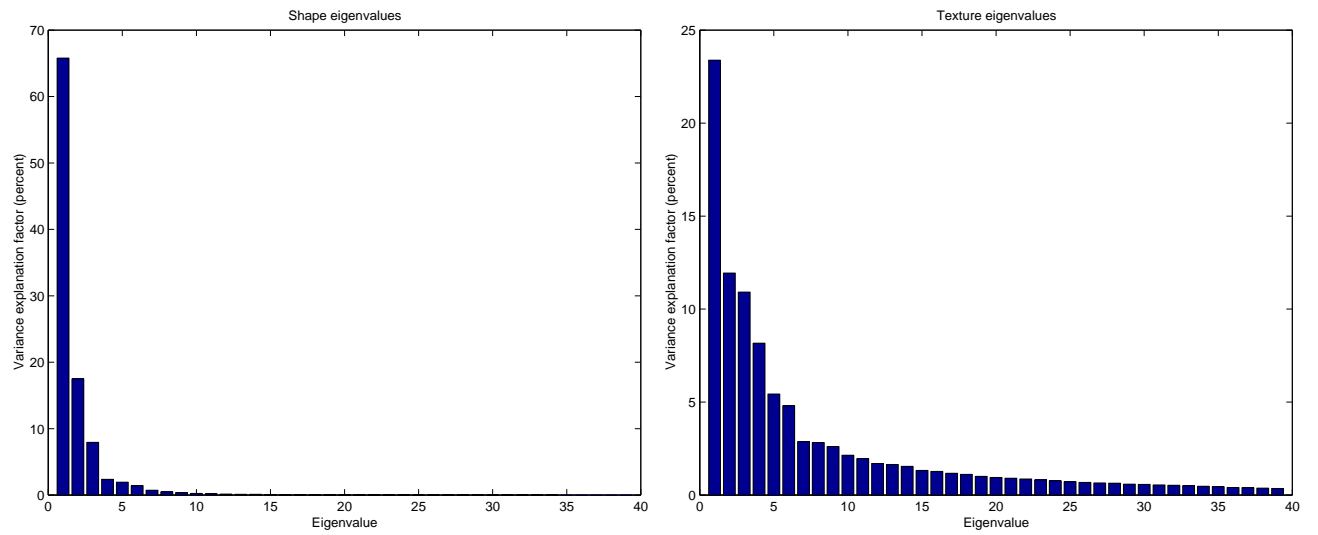


Figure 7: Shape (left) and texture (right) eigenvalues in descending order.

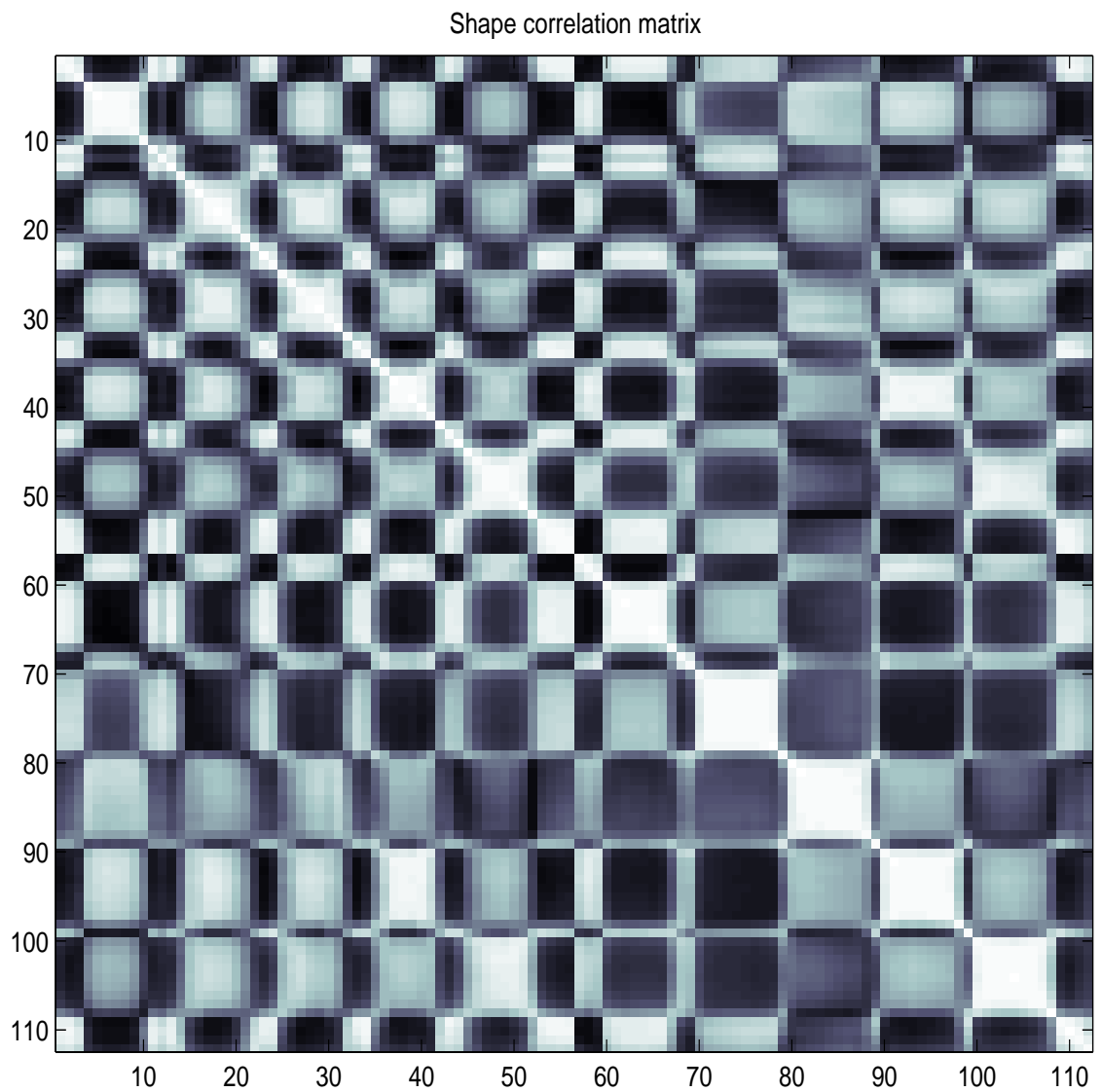


Figure 8: Correlation matrix of the annotations.

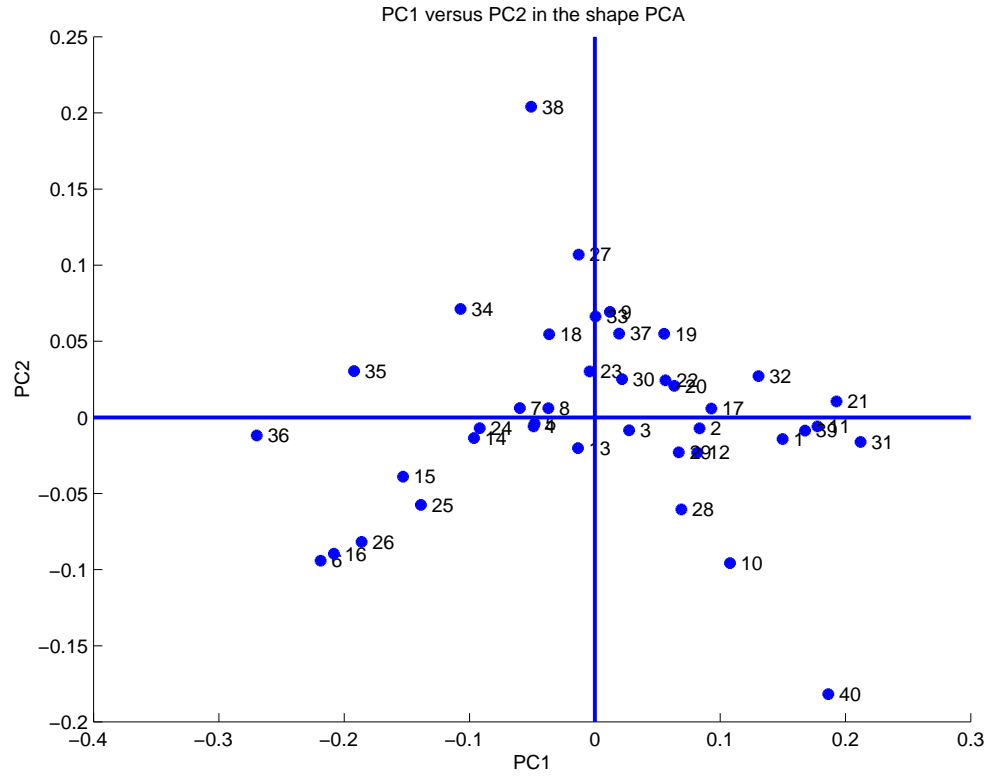


Figure 9: PC1 ($b_{s,1}$) vs. PC2 ($b_{s,2}$) in the shape PCA.

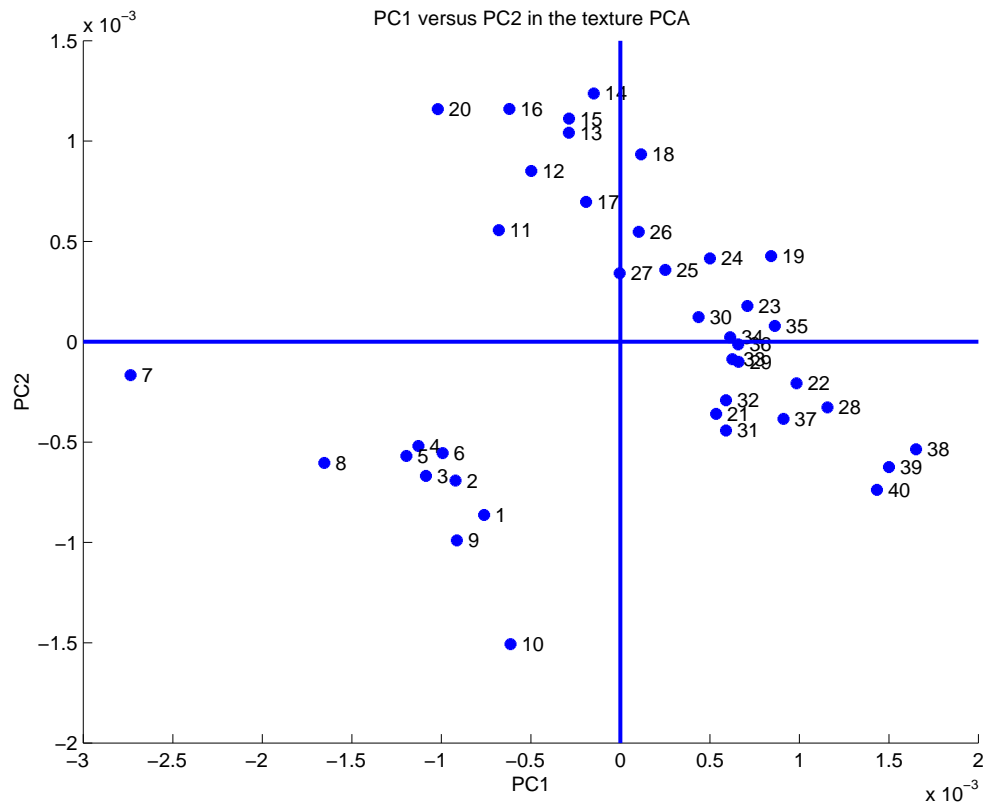


Figure 10: PC1 ($b_{g,1}$) versus PC2 ($b_{g,2}$) in the texture PCA.

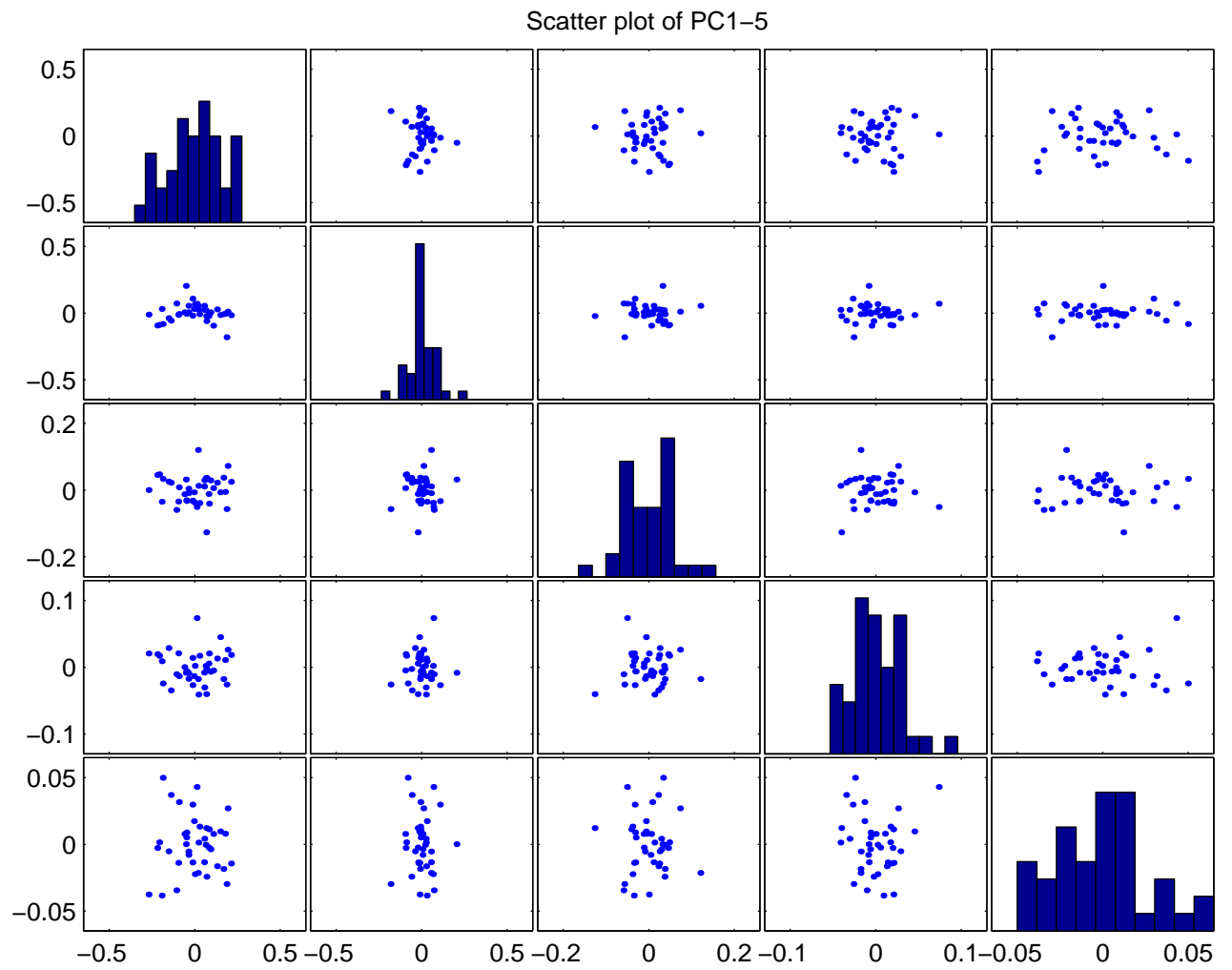


Figure 11: Scatter plot of PC1-5 (PC1 is top-left).



Figure 12: Texture variance, black corresponds to high variance.

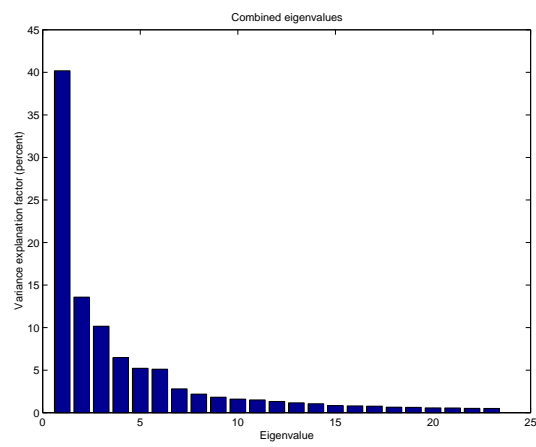


Figure 13: Combined eigenvalues.

#####

Active Appearance Model File

Written : Friday January 18 - 2002 [11:53]

Format version : 0.94

Shapes : 40

Shape points : 56

Texture samples : 89140

Model reduction : 1

Add Shape Extents : 0

Convex hull used : No

Tangent space used : No

Learning Method : 0

Variance Exp. Level: 95

Parameters used : 23

Mean shape area : 89160.74

Combined mode variation :

1	38.27%	(38.27%)
2	12.93%	(51.20%)
3	9.68%	(60.88%)
4	6.16%	(67.04%)
5	4.97%	(72.01%)
6	4.87%	(76.88%)
7	2.66%	(79.55%)
8	2.08%	(81.63%)
9	1.74%	(83.37%)
10	1.52%	(84.89%)
11	1.43%	(86.32%)
12	1.26%	(87.59%)
13	1.10%	(88.69%)
14	1.00%	(89.70%)
15	0.80%	(90.49%)
16	0.76%	(91.25%)
17	0.73%	(91.98%)
18	0.62%	(92.60%)
19	0.60%	(93.20%)
20	0.54%	(93.74%)
21	0.53%	(94.26%)
22	0.49%	(94.75%)
23	0.48%	(95.23%)

Shape mode variation :

1	65.79%	(65.79%)
2	17.51%	(83.30%)

3	7.95%	(91.24%)
4	2.37%	(93.62%)
5	1.95%	(95.56%)
6	1.42%	(96.99%)
7	0.73%	(97.72%)
8	0.48%	(98.20%)
9	0.39%	(98.59%)
10	0.24%	(98.83%)
11	0.20%	(99.03%)
12	0.15%	(99.18%)
13	0.11%	(99.29%)
14	0.11%	(99.40%)
15	0.09%	(99.49%)
16	0.06%	(99.54%)
17	0.05%	(99.59%)
18	0.05%	(99.64%)
19	0.04%	(99.68%)
20	0.04%	(99.72%)
21	0.03%	(99.75%)
22	0.03%	(99.78%)
23	0.03%	(99.81%)
24	0.03%	(99.84%)
25	0.02%	(99.86%)
26	0.02%	(99.87%)
27	0.02%	(99.89%)
28	0.01%	(99.91%)
29	0.01%	(99.92%)
30	0.01%	(99.93%)
31	0.01%	(99.94%)
32	0.01%	(99.96%)
33	0.01%	(99.96%)
34	0.01%	(99.97%)
35	0.01%	(99.98%)
36	0.01%	(99.99%)
37	0.01%	(99.99%)
38	0.00%	(100.00%)
39	0.00%	(100.00%)

Texture mode variation :

1	23.38%	(23.38%)
2	11.94%	(35.32%)
3	10.92%	(46.23%)
4	8.17%	(54.40%)
5	5.43%	(59.84%)
6	4.80%	(64.63%)
7	2.88%	(67.51%)
8	2.82%	(70.33%)
9	2.61%	(72.94%)
10	2.14%	(75.08%)
11	1.96%	(77.04%)
12	1.70%	(78.73%)
13	1.65%	(80.38%)
14	1.54%	(81.93%)
15	1.33%	(83.25%)
16	1.27%	(84.52%)
17	1.17%	(85.70%)
18	1.11%	(86.81%)
19	1.01%	(87.82%)
20	0.95%	(88.77%)
21	0.91%	(89.68%)

22	0.87%	(90.54%)
23	0.82%	(91.36%)
24	0.77%	(92.13%)
25	0.72%	(92.85%)
26	0.68%	(93.53%)
27	0.65%	(94.18%)
28	0.64%	(94.82%)
29	0.58%	(95.40%)
30	0.57%	(95.97%)
31	0.55%	(96.52%)
32	0.53%	(97.05%)
33	0.50%	(97.55%)
34	0.47%	(98.02%)
35	0.45%	(98.47%)
36	0.41%	(98.88%)
37	0.39%	(99.27%)
38	0.37%	(99.64%)
39	0.36%	(100.00%)

#####