

AAM Data Report

Generated by the AAM-API
[c:/users/mbs/studies/hands/model1_tangent]

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January 18, 2002

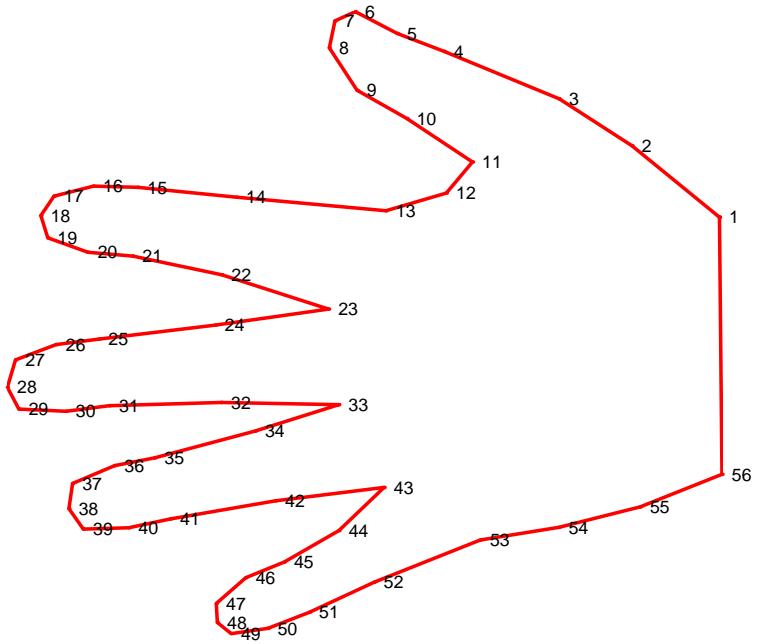


Figure 1: Mean shape.

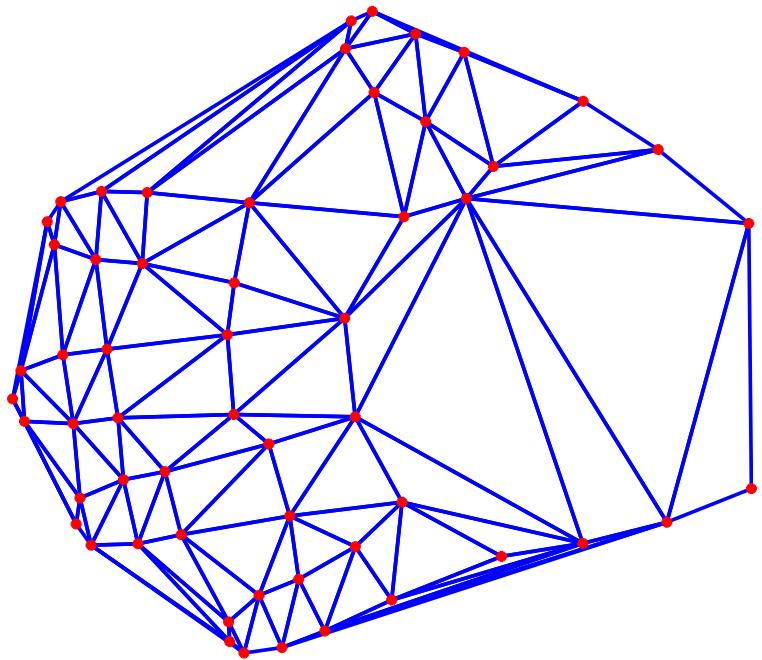


Figure 2: Delaunay triangulation of the mean shape.

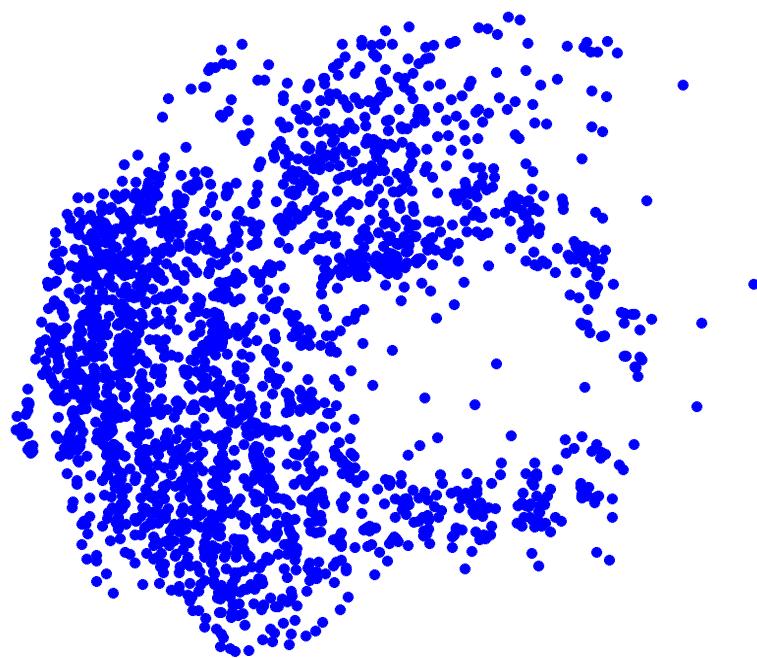


Figure 3: Point cloud of the unaligned annotations.

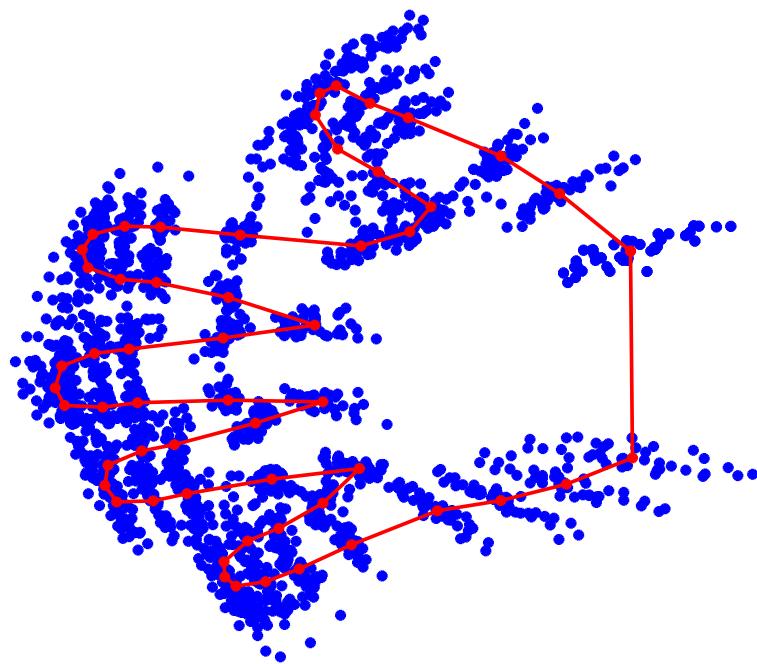


Figure 4: Point cloud of the aligned annotations with mean shape fully drawn in red.

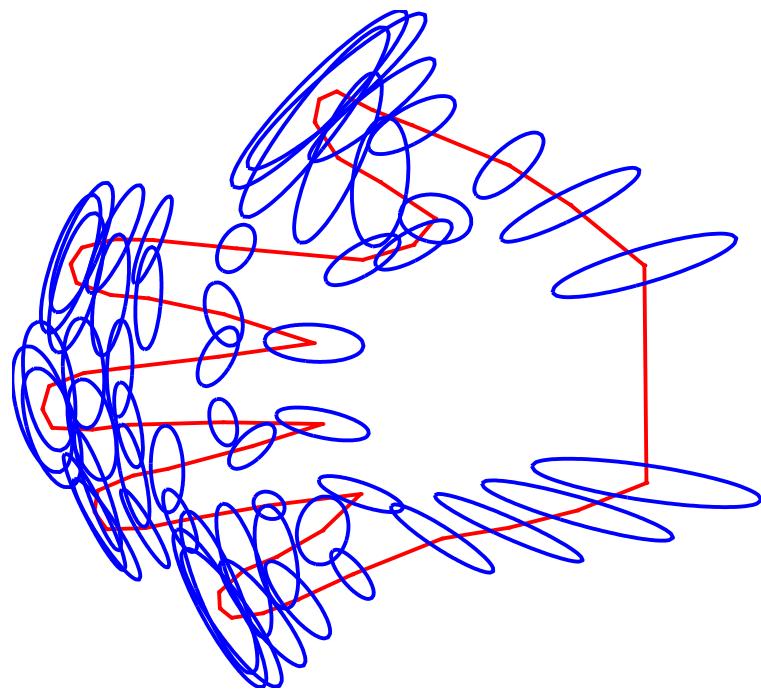


Figure 5: Independent principal component analysis of each model point.

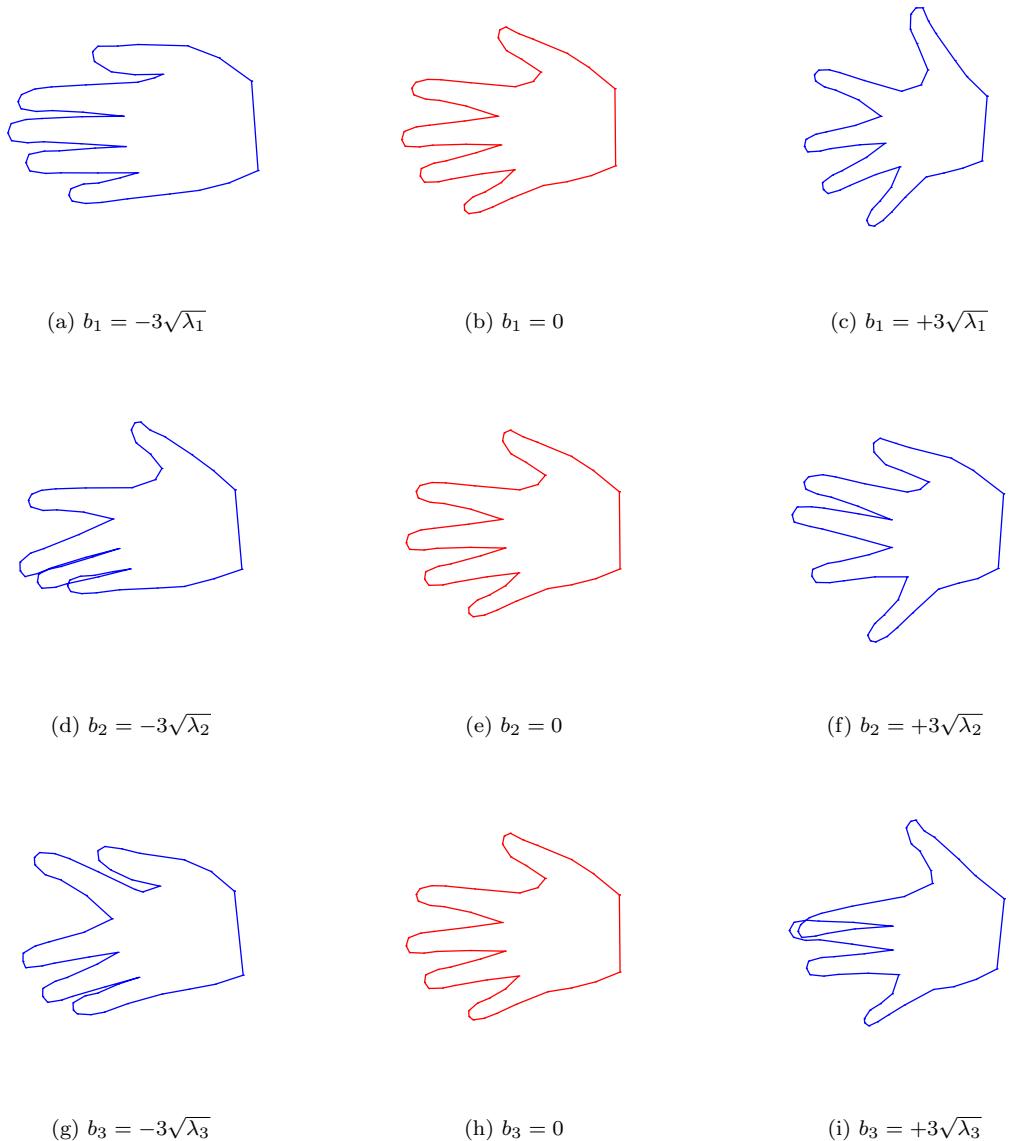


Figure 6: Mean shape deformation using 1st, 2nd and 3rd principal mode. $b_i = -3\sqrt{\lambda_i}$, $b_i = 0$, $b_i = 3\sqrt{\lambda_i}$.

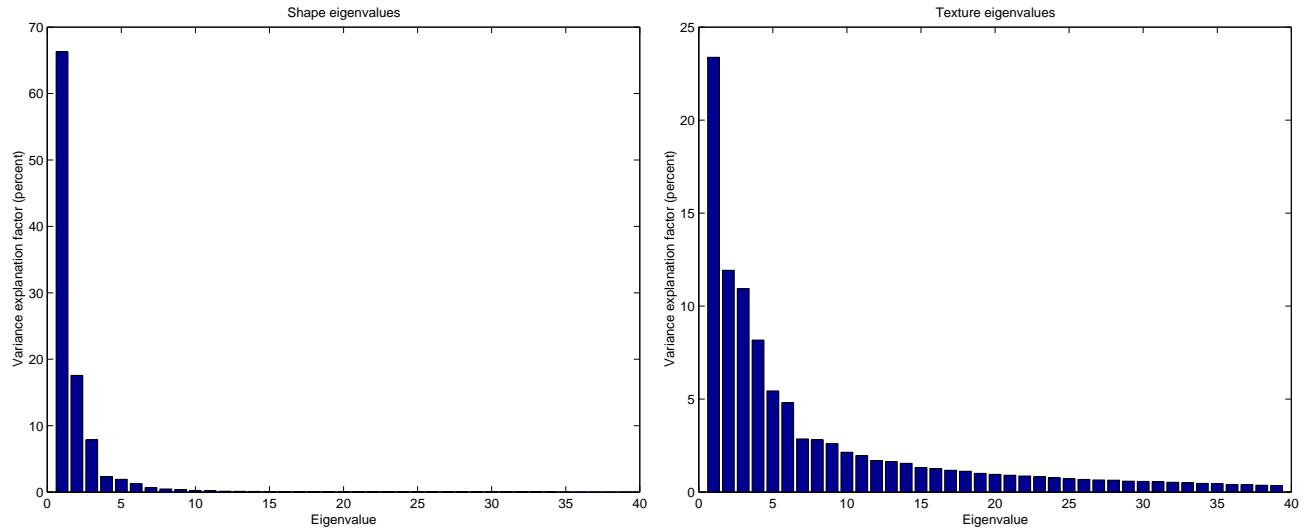


Figure 7: Shape (left) and texture (right) eigenvalues in descending order.

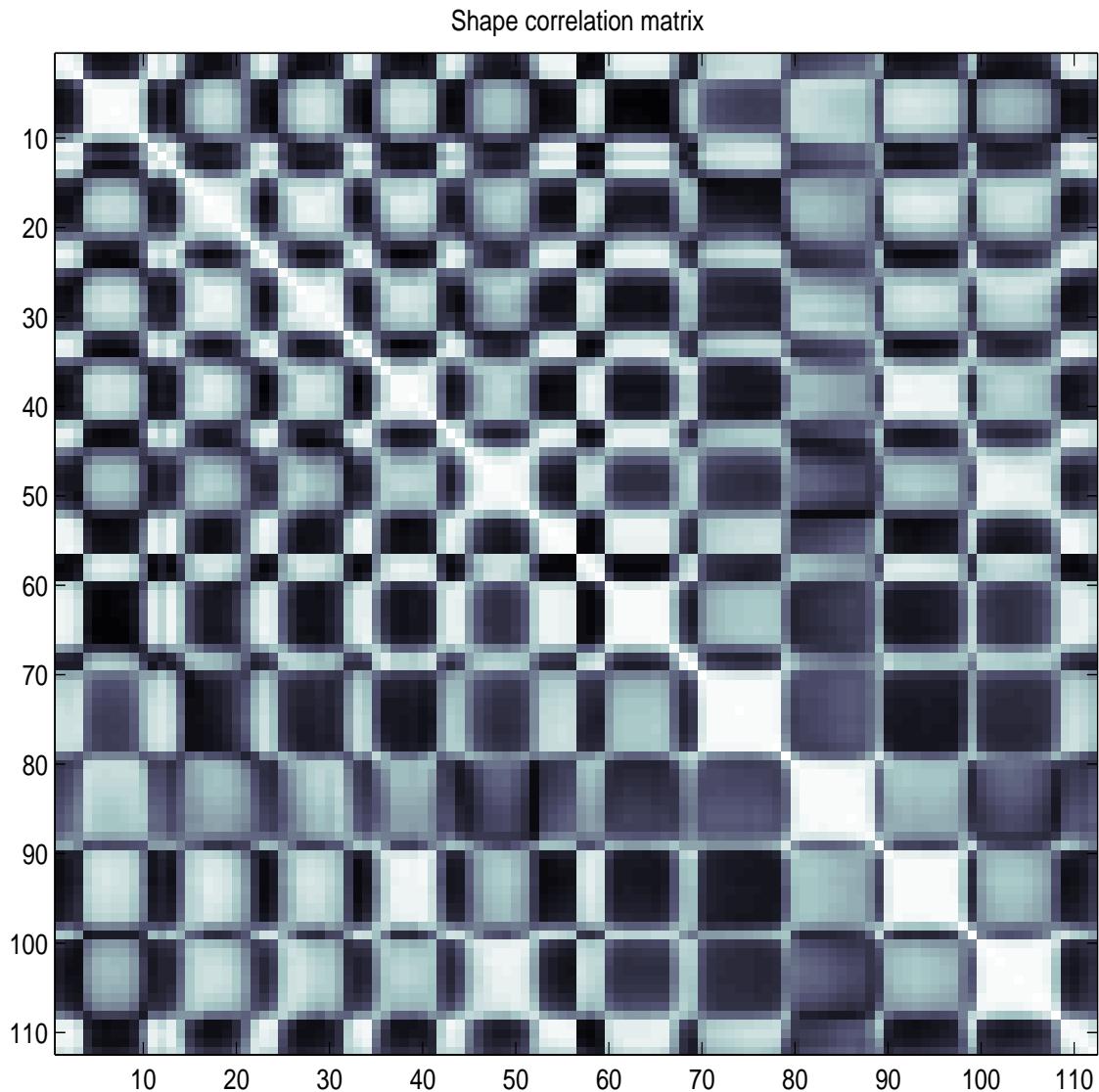


Figure 8: Correlation matrix of the annotations.

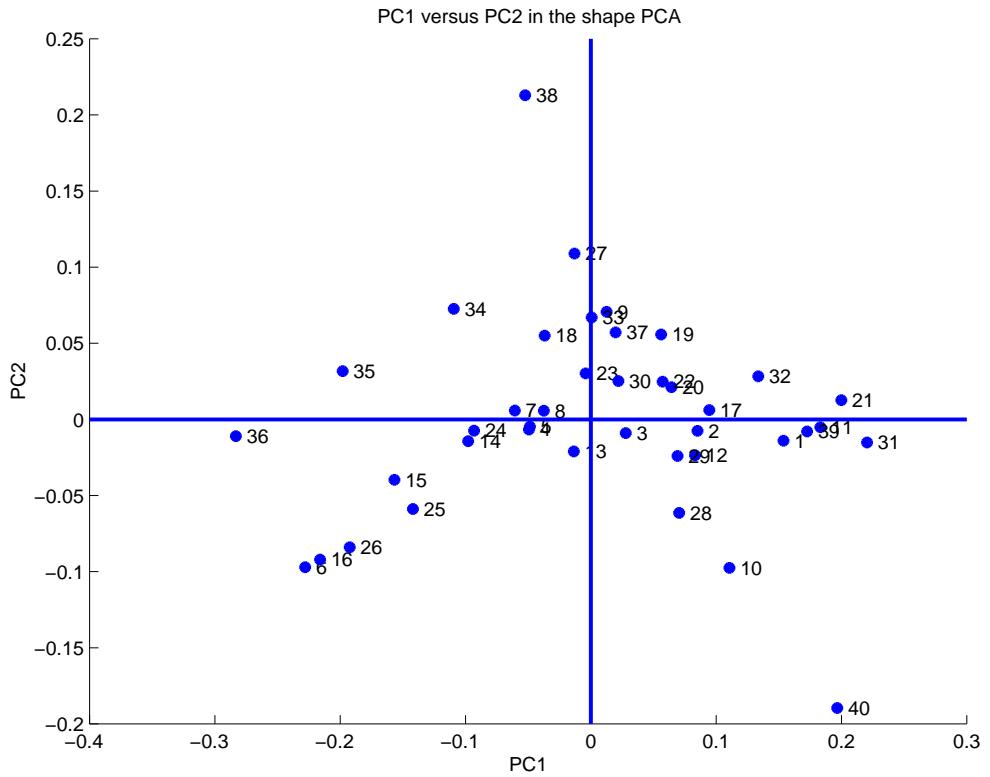


Figure 9: PC1 ($b_{s,1}$) vs. PC2 ($b_{s,2}$) in the shape PCA.

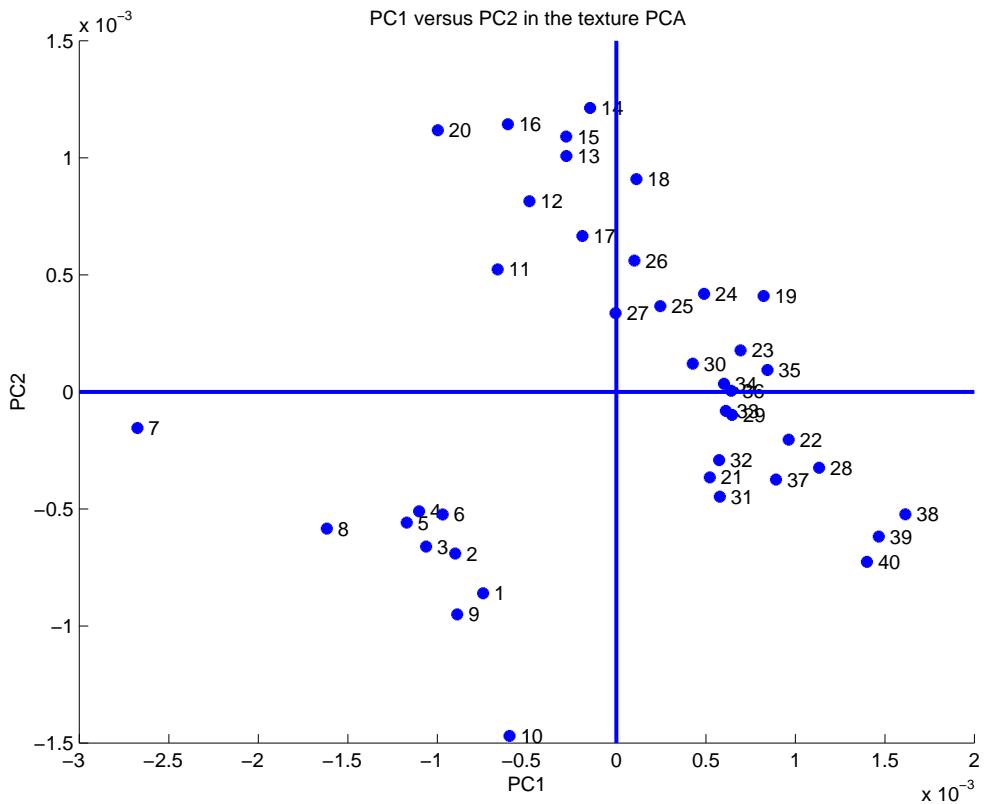


Figure 10: PC1 ($b_{g,1}$) versus PC2 ($b_{g,2}$) in the texture PCA.

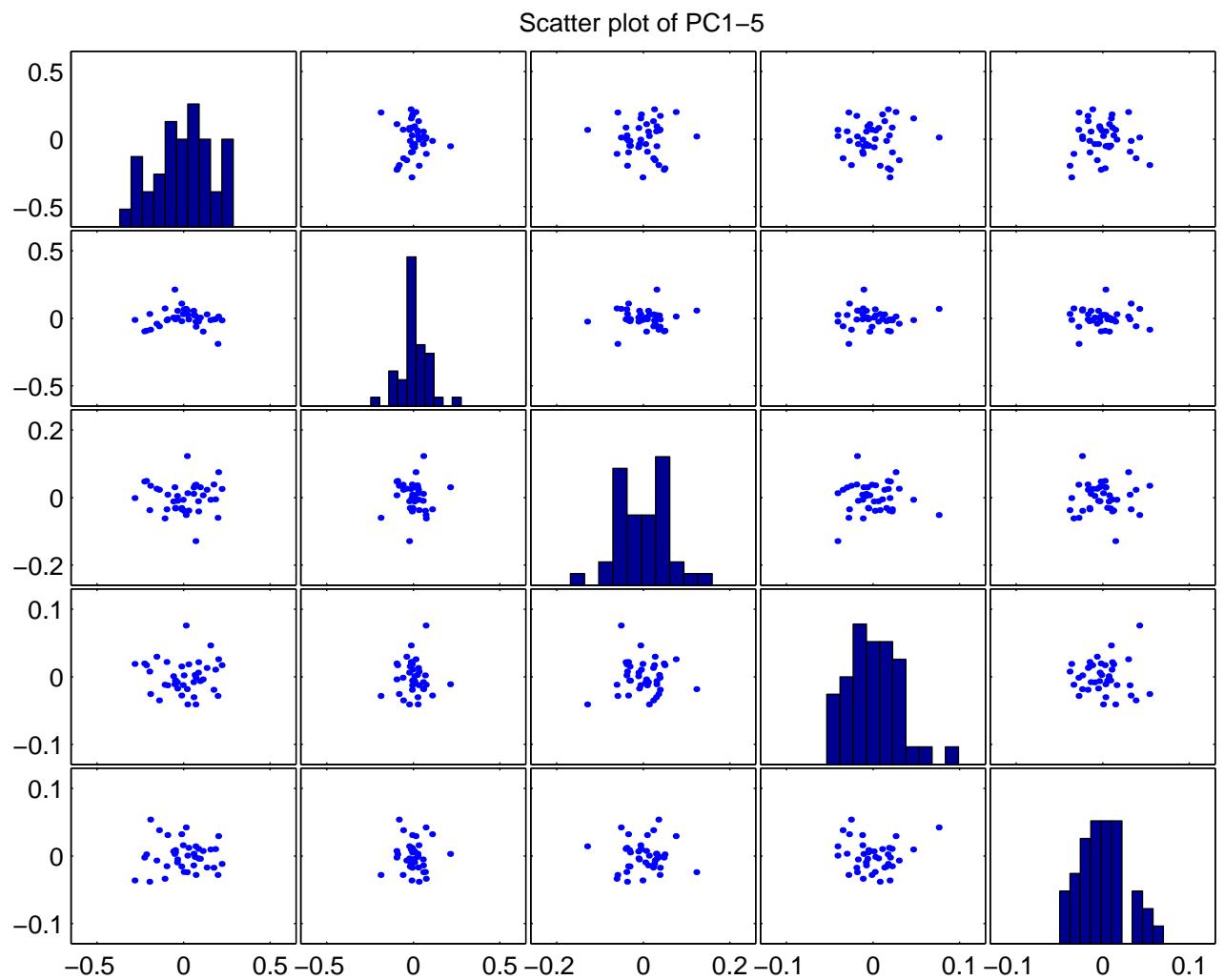


Figure 11: Scatter plot of PC1–5 (PC1 is top-left).



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

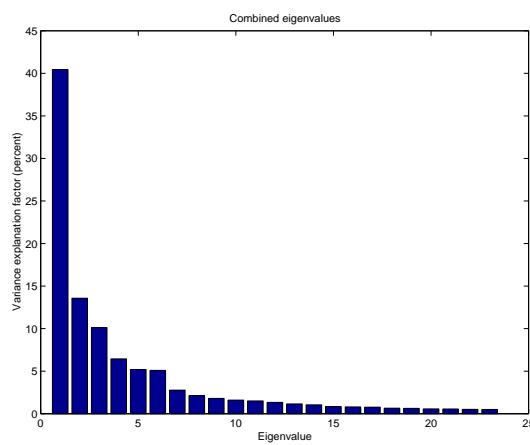


Figure 13: Combined eigenvalues.

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Active Appearance Model File

Written : Friday January 18 - 2002 [11:54]

Format version : 0.94

Shapes : 40

Shape points : 56

Texture samples : 93360

Model reduction : 1

Add Shape Extents : 0

Convex hull used : No

Tangent space used : Yes

Learning Method : 0

Variance Exp. Level: 95

Parameters used : 23

Mean shape area : 93343.65

Combined mode variation :

1	38.51%	(38.51%)
2	12.92%	(51.43%)
3	9.64%	(61.07%)
4	6.14%	(67.21%)
5	4.95%	(72.17%)
6	4.85%	(77.02%)
7	2.64%	(79.66%)
8	2.02%	(81.68%)
9	1.72%	(83.40%)
10	1.52%	(84.92%)
11	1.43%	(86.35%)
12	1.26%	(87.61%)
13	1.10%	(88.71%)
14	1.00%	(89.71%)
15	0.79%	(90.50%)
16	0.76%	(91.26%)
17	0.73%	(91.99%)
18	0.62%	(92.61%)
19	0.60%	(93.21%)
20	0.54%	(93.75%)
21	0.53%	(94.27%)
22	0.49%	(94.76%)
23	0.48%	(95.24%)

Shape mode variation :

1	66.28%	(66.28%)
2	17.56%	(83.84%)

3	7.85%	(91.70%)
4	2.33%	(94.03%)
5	1.92%	(95.95%)
6	1.26%	(97.22%)
7	0.65%	(97.86%)
8	0.47%	(98.33%)
9	0.35%	(98.68%)
10	0.21%	(98.88%)
11	0.20%	(99.08%)
12	0.13%	(99.21%)
13	0.11%	(99.32%)
14	0.10%	(99.42%)
15	0.09%	(99.51%)
16	0.05%	(99.57%)
17	0.05%	(99.61%)
18	0.04%	(99.66%)
19	0.04%	(99.70%)
20	0.04%	(99.73%)
21	0.03%	(99.76%)
22	0.03%	(99.79%)
23	0.03%	(99.82%)
24	0.02%	(99.84%)
25	0.02%	(99.86%)
26	0.02%	(99.88%)
27	0.02%	(99.90%)
28	0.01%	(99.91%)
29	0.01%	(99.92%)
30	0.01%	(99.94%)
31	0.01%	(99.95%)
32	0.01%	(99.96%)
33	0.01%	(99.97%)
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	11.92%	(35.30%)
3	10.94%	(46.24%)
4	8.17%	(54.41%)
5	5.44%	(59.85%)
6	4.81%	(64.66%)
7	2.86%	(67.51%)
8	2.81%	(70.33%)
9	2.61%	(72.93%)
10	2.14%	(75.07%)
11	1.96%	(77.03%)
12	1.70%	(78.73%)
13	1.64%	(80.37%)
14	1.55%	(81.92%)
15	1.32%	(83.24%)
16	1.27%	(84.51%)
17	1.17%	(85.68%)
18	1.12%	(86.80%)
19	1.01%	(87.81%)
20	0.95%	(88.76%)
21	0.90%	(89.66%)

22	0.87%	(90.53%)
23	0.82%	(91.35%)
24	0.77%	(92.12%)
25	0.72%	(92.84%)
26	0.68%	(93.52%)
27	0.65%	(94.17%)
28	0.64%	(94.81%)
29	0.59%	(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%)

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