

Mustererkennung - Übung 9

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Task 1 (trained 20000 rounds with random samples, $\alpha=0.3$)

W1 =

6.0597	3.9954
6.0855	3.9902
-2.5898	-6.1194

W2 =

8.0993
-8.7883
-3.6770

Task 2 (trained with 100 rounds on the training data each)

k=2, accuracy = 0.72527

	0	1	2	3	4	5	6	7	8	9
0	331	1	0	1	22	1	5	0	2	0
1	0	181	104	12	59	0	0	0	0	8
2	0	21	272	68	0	0	0	2	0	1
3	0	30	1	303	1	0	0	0	0	1
4	0	0	0	2	301	0	17	0	0	44
5	9	8	0	1	76	139	0	6	14	82
6	1	0	0	1	21	0	313	0	0	0
7	0	26	13	4	0	3	0	275	17	26
8	112	0	0	10	6	101	0	7	100	0
9	1	9	0	0	4	0	0	0	0	322

k=4, accuracy=0.83219

	0	1	2	3	4	5	6	7	8	9
0	327	0	0	0	0	0	0	0	36	0
1	0	191	82	2	4	0	55	28	1	1
2	0	19	320	19	0	0	0	6	0	0
3	0	8	0	326	0	0	0	0	0	2
4	0	0	0	0	341	0	9	0	0	14
5	1	0	0	27	3	167	2	0	0	135
6	1	0	0	0	7	0	326	0	1	1
7	1	54	2	2	3	0	0	282	5	15
8	12	0	0	0	0	12	0	0	312	0
9	0	11	0	3	0	0	0	0	3	319

k=8, accuracy=0.90366

	0	1	2	3	4	5	6	7	8	9
0	326	0	0	0	0	1	2	0	34	0
1	0	350	11	0	1	0	0	2	0	0
2	0	5	356	0	0	0	0	3	0	0
3	0	2	0	332	0	0	0	0	0	2
4	0	1	0	0	358	0	0	0	0	5
5	0	20	0	21	47	166	0	2	0	79
6	1	0	1	0	0	0	319	0	15	0
7	0	30	6	0	1	0	0	315	2	10
8	0	0	0	0	0	2	0	9	325	0
9	0	14	0	4	2	0	0	1	1	314