MOMENTUM = 0.3 & LEARNING RATE = 0.3

COMPLETE NETWORK

Random number generator seed: 102194

277 images in training set

139 images in test1 set

208 images in test2 set

creating net

Training underway (going to 100 epochs)

Will save network every 100 epochs

0 0.0

epoch: 0

result on trainlist:

classifcation accuracy: 4.69314% #### Number of wrong guesses: 264 #### average of the error function: 0.29267%

number of type 1 error: 264

number of type 2 error: 2

result on testlist:

classifcation accuracy: 2.15827% #### Number of wrong guesses: 136 #### average of the error function: 0.301805%

number of type 1 error: 136

number of type 2 error: 0

epoch: 1

result on trainlist:

classifcation accuracy: 7.22022% #### Number of wrong guesses: 257 #### average of the error function: 0.272266%

number of type 1 error: 257

number of type 2 error: 3

result on testlist:

classifcation accuracy: 3.59712% #### Number of wrong guesses: 134 #### average of the error function: 0.289844%

number of type 1 error: 134

number of type 2 error: 4

epoch: 2

result on trainlist:

classifcation accuracy: 12.9964% #### Number of wrong guesses: 241 #### average of the error function: 0.248689%

number of type 1 error: 241

number of type 2 error: 2

result on testlist:

classifcation accuracy: 7.91367% #### Number of wrong guesses: 128 #### average of the error function: 0.272101%

number of type 1 error: 128

number of type 2 error: 1

epoch: 3

result on trainlist:

classifcation accuracy: 17.6895% #### Number of wrong guesses: 228 #### average of the error function: 0.227172%

number of type 1 error: 228

number of type 2 error: 0

result on testlist:

classifcation accuracy: 10.0719% #### Number of wrong guesses: 125 #### average of the error function: 0.253493%

number of type 1 error: 125

number of type 2 error: 2

epoch: 4

result on trainlist:

classifcation accuracy: 24.5487% #### Number of wrong guesses: 209 #### average of the error function: 0.219047%

number of type 1 error: 209

number of type 2 error: 1

result on testlist:

classifcation accuracy: 15.1079% #### Number of wrong guesses: 118 #### average of the error function: 0.245714%

number of type 1 error: 118

number of type 2 error: 1

epoch: 5

result on trainlist:

classifcation accuracy: 32.491% #### Number of wrong guesses: 187 #### average of the error function: 0.19712%

number of type 1 error: 187

number of type 2 error: 3

result on testlist:

classifcation accuracy: 24.4604% #### Number of wrong guesses: 105 #### average of the error function: 0.227214%

number of type 1 error: 105

number of type 2 error: 5

epoch: 6

result on trainlist:

classifcation accuracy: 38.2671% #### Number of wrong guesses: 171 #### average of the error function: 0.18823%

number of type 1 error: 171

number of type 2 error: 4

result on testlist:

classifcation accuracy: 28.0576% #### Number of wrong guesses: 100 #### average of the error function: 0.217303%

number of type 1 error: 100

number of type 2 error: 5

epoch: 7

result on trainlist:

classifcation accuracy: 43.6823% #### Number of wrong guesses: 156 #### average of the error function: 0.176224%

number of type 1 error: 156

number of type 2 error: 6

result on testlist:

classifcation accuracy: 33.8129% #### Number of wrong guesses: 92 #### average of the error function: 0.20717%

number of type 1 error: 92

number of type 2 error: 6

epoch: 8

result on trainlist:

classifcation accuracy: 46.9314% #### Number of wrong guesses: 147 #### average of the error function: 0.164557%

number of type 1 error: 147

number of type 2 error: 5

result on testlist:

classifcation accuracy: 37.4101% #### Number of wrong guesses: 87 #### average of the error function: 0.198862%

number of type 1 error: 86

number of type 2 error: 8

epoch: 9

result on trainlist:

classifcation accuracy: 48.0144% #### Number of wrong guesses: 144 #### average of the error function: 0.157867%

number of type 1 error: 144

number of type 2 error: 1

result on testlist:

classifcation accuracy: 39.5683% #### Number of wrong guesses: 84 #### average of the error function: 0.188992%

number of type 1 error: 83

number of type 2 error: 7

epoch: 10

result on trainlist:

classifcation accuracy: 49.4585% #### Number of wrong guesses: 140 #### average of the error function: 0.151849%

number of type 1 error: 140

number of type 2 error: 1

result on testlist:

classifcation accuracy: 43.8849% #### Number of wrong guesses: 78 #### average of the error function: 0.178733%

number of type 1 error: 77

number of type 2 error: 5

epoch: 11

result on trainlist:

classifcation accuracy: 50.9025% #### Number of wrong guesses: 136 #### average of the error function: 0.14573%

number of type 1 error: 135

number of type 2 error: 2

result on testlist:

classifcation accuracy: 47.482% #### Number of wrong guesses: 73 #### average of the error function: 0.173372%

number of type 1 error: 72

number of type 2 error: 6

epoch: 12

result on trainlist:

classifcation accuracy: 45.4874% #### Number of wrong guesses: 151 #### average of the error function: 0.164041%

number of type 1 error: 151

number of type 2 error: 6

result on testlist:

classifcation accuracy: 39.5683% #### Number of wrong guesses: 84 #### average of the error function: 0.19637%

number of type 1 error: 83

number of type 2 error: 9

epoch: 13

result on trainlist:

classifcation accuracy: 53.0686% #### Number of wrong guesses: 130 #### average of the error function: 0.137829%

number of type 1 error: 130

number of type 2 error: 4

result on testlist:

classifcation accuracy: 47.482% #### Number of wrong guesses: 73 #### average of the error function: 0.172531%

number of type 1 error: 71

number of type 2 error: 9

epoch: 14

result on trainlist:

classifcation accuracy: 56.3177% #### Number of wrong guesses: 121 #### average of the error function: 0.130971%

number of type 1 error: 120

number of type 2 error: 7

result on testlist:

classifcation accuracy: 52.518% #### Number of wrong guesses: 66 #### average of the error function: 0.158174%

number of type 1 error: 63

number of type 2 error: 9

epoch: 15

result on trainlist:

classifcation accuracy: 63.1769% #### Number of wrong guesses: 102 #### average of the error function: 0.121826%

number of type 1 error: 102

number of type 2 error: 5

result on testlist:

classifcation accuracy: 56.8345% #### Number of wrong guesses: 60 #### average of the error function: 0.151402%

number of type 1 error: 58

number of type 2 error: 10

epoch: 16

result on trainlist:

classifcation accuracy: 60.6498% #### Number of wrong guesses: 109 #### average of the error function: 0.122769%

number of type 1 error: 108

number of type 2 error: 4

result on testlist:

classifcation accuracy: 53.2374% #### Number of wrong guesses: 65 #### average of the error function: 0.157769%

number of type 1 error: 63

number of type 2 error: 11

epoch: 17

result on trainlist:

classifcation accuracy: 65.704% #### Number of wrong guesses: 95 #### average of the error function: 0.114437%

number of type 1 error: 94

number of type 2 error: 6

result on testlist:

classifcation accuracy: 56.8345% #### Number of wrong guesses: 60 #### average of the error function: 0.147013%

number of type 1 error: 57

number of type 2 error: 11

epoch: 18

result on trainlist:

classifcation accuracy: 64.2599% #### Number of wrong guesses: 99 #### average of the error function: 0.119476%

number of type 1 error: 98

number of type 2 error: 7

result on testlist:

classifcation accuracy: 58.9928% #### Number of wrong guesses: 57 #### average of the error function: 0.14854%

number of type 1 error: 56

number of type 2 error: 12

epoch: 19

result on trainlist:

classifcation accuracy: 66.065% #### Number of wrong guesses: 94 #### average of the error function: 0.107861%

number of type 1 error: 94

number of type 2 error: 0

result on testlist:

classifcation accuracy: 58.9928% #### Number of wrong guesses: 57 #### average of the error function: 0.135976%

number of type 1 error: 55

number of type 2 error: 7

epoch: 20

result on trainlist:

classifcation accuracy: 65.343% #### Number of wrong guesses: 96 #### average of the error function: 0.107043%

number of type 1 error: 94

number of type 2 error: 7

result on testlist:

classifcation accuracy: 58.9928% #### Number of wrong guesses: 57 #### average of the error function: 0.134295%

number of type 1 error: 55

number of type 2 error: 9

epoch: 21

result on trainlist:

classifcation accuracy: 64.9819% #### Number of wrong guesses: 97 #### average of the error function: 0.115592%

number of type 1 error: 95

number of type 2 error: 5

result on testlist:

classifcation accuracy: 57.554% #### Number of wrong guesses: 59 #### average of the error function: 0.141424%

number of type 1 error: 57

number of type 2 error: 8

epoch: 22

result on trainlist:

classifcation accuracy: 65.704% #### Number of wrong guesses: 95 #### average of the error function: 0.104897%

number of type 1 error: 93

number of type 2 error: 9

result on testlist:

classifcation accuracy: 56.8345% #### Number of wrong guesses: 60 #### average of the error function: 0.136592%

number of type 1 error: 55

number of type 2 error: 13

epoch: 23

result on trainlist:

classifcation accuracy: 68.5921% #### Number of wrong guesses: 87 #### average of the error function: 0.0955172%

number of type 1 error: 87

number of type 2 error: 1

result on testlist:

classifcation accuracy: 62.5899% #### Number of wrong guesses: 52 #### average of the error function: 0.11994%

number of type 1 error: 49

number of type 2 error: 5

epoch: 24

result on trainlist:

classifcation accuracy: 74.0072% #### Number of wrong guesses: 72 #### average of the error function: 0.091825%

number of type 1 error: 72

number of type 2 error: 6

result on testlist:

classifcation accuracy: 65.4676% #### Number of wrong guesses: 48 #### average of the error function: 0.115367%

number of type 1 error: 45

number of type 2 error: 5

epoch: 25

result on trainlist:

classifcation accuracy: 76.1733% #### Number of wrong guesses: 66 #### average of the error function: 0.0945593%

number of type 1 error: 64

number of type 2 error: 9

result on testlist:

classifcation accuracy: 70.5036% #### Number of wrong guesses: 41 #### average of the error function: 0.111314%

number of type 1 error: 39

number of type 2 error: 7

epoch: 26

result on trainlist:

classifcation accuracy: 76.8953% #### Number of wrong guesses: 64 #### average of the error function: 0.0930046%

number of type 1 error: 58

number of type 2 error: 13

result on testlist:

classifcation accuracy: 66.1871% #### Number of wrong guesses: 47 #### average of the error function: 0.123181%

number of type 1 error: 39

number of type 2 error: 13

epoch: 27

result on trainlist:

classifcation accuracy: 75.0903% #### Number of wrong guesses: 69 #### average of the error function: 0.112384%

number of type 1 error: 69

number of type 2 error: 17

result on testlist:

classifcation accuracy: 72.6619% #### Number of wrong guesses: 38 #### average of the error function: 0.115646%

number of type 1 error: 36

number of type 2 error: 9

epoch: 28

result on trainlist:

classifcation accuracy: 79.0614% #### Number of wrong guesses: 58 #### average of the error function: 0.0834985%

number of type 1 error: 58

number of type 2 error: 6

result on testlist:

classifcation accuracy: 73.3813% #### Number of wrong guesses: 37 #### average of the error function: 0.10473%

number of type 1 error: 34

number of type 2 error: 6

epoch: 29

result on trainlist:

classifcation accuracy: 79.0614% #### Number of wrong guesses: 58 #### average of the error function: 0.08306%

number of type 1 error: 58

number of type 2 error: 6

result on testlist:

classifcation accuracy: 74.1007% #### Number of wrong guesses: 36 #### average of the error function: 0.102747%

number of type 1 error: 34

number of type 2 error: 6

epoch: 30

result on trainlist:

classifcation accuracy: 79.0614% #### Number of wrong guesses: 58 #### average of the error function: 0.0818999%

number of type 1 error: 58

number of type 2 error: 6

result on testlist:

classifcation accuracy: 73.3813% #### Number of wrong guesses: 37 #### average of the error function: 0.101812%

number of type 1 error: 33

number of type 2 error: 8

epoch: 31

result on trainlist:

classifcation accuracy: 79.0614% #### Number of wrong guesses: 58 #### average of the error function: 0.0800001%

number of type 1 error: 58

number of type 2 error: 5

result on testlist:

classifcation accuracy: 73.3813% #### Number of wrong guesses: 37 #### average of the error function: 0.100502%

number of type 1 error: 34

number of type 2 error: 9

epoch: 32

result on trainlist:

classifcation accuracy: 77.9783% #### Number of wrong guesses: 61 #### average of the error function: 0.0910361%

number of type 1 error: 58

number of type 2 error: 14

result on testlist:

classifcation accuracy: 74.1007% #### Number of wrong guesses: 36 #### average of the error function: 0.102936%

number of type 1 error: 32

number of type 2 error: 9

epoch: 33

result on trainlist:

classifcation accuracy: 80.1444% #### Number of wrong guesses: 55 #### average of the error function: 0.0792472%

number of type 1 error: 55

number of type 2 error: 5

result on testlist:

classifcation accuracy: 75.5396% #### Number of wrong guesses: 34 #### average of the error function: 0.100023%

number of type 1 error: 30

number of type 2 error: 8

epoch: 34

result on trainlist:

classifcation accuracy: 82.3105% #### Number of wrong guesses: 49 #### average of the error function: 0.0770491%

number of type 1 error: 49

number of type 2 error: 6

result on testlist:

classifcation accuracy: 79.8561% #### Number of wrong guesses: 28 #### average of the error function: 0.0933845%

number of type 1 error: 26

number of type 2 error: 5

epoch: 35

result on trainlist:

classifcation accuracy: 81.5884% #### Number of wrong guesses: 51 #### average of the error function: 0.0743937%

number of type 1 error: 51

number of type 2 error: 3

result on testlist:

classifcation accuracy: 79.8561% #### Number of wrong guesses: 28 #### average of the error function: 0.0927868%

number of type 1 error: 24

number of type 2 error: 7

epoch: 36

result on trainlist:

classifcation accuracy: 83.0325% #### Number of wrong guesses: 47 #### average of the error function: 0.0737018%

number of type 1 error: 47

number of type 2 error: 3

result on testlist:

classifcation accuracy: 80.5755% #### Number of wrong guesses: 27 #### average of the error function: 0.0905002%

number of type 1 error: 24

number of type 2 error: 6

epoch: 37

result on trainlist:

classifcation accuracy: 81.5884% #### Number of wrong guesses: 51 #### average of the error function: 0.0745699%

number of type 1 error: 51

number of type 2 error: 3

result on testlist:

classifcation accuracy: 78.4173% #### Number of wrong guesses: 30 #### average of the error function: 0.0952718%

number of type 1 error: 25

number of type 2 error: 9

epoch: 38

result on trainlist:

classifcation accuracy: 84.1155% #### Number of wrong guesses: 44 #### average of the error function: 0.0774222%

number of type 1 error: 43

number of type 2 error: 8

result on testlist:

classifcation accuracy: 81.295% #### Number of wrong guesses: 26 #### average of the error function: 0.098715%

number of type 1 error: 23

number of type 2 error: 9

epoch: 39

result on trainlist:

classifcation accuracy: 83.0325% #### Number of wrong guesses: 47 #### average of the error function: 0.0734515%

number of type 1 error: 47

number of type 2 error: 3

result on testlist:

classifcation accuracy: 82.0144% #### Number of wrong guesses: 25 #### average of the error function: 0.0914812%

number of type 1 error: 23

number of type 2 error: 6

epoch: 40

result on trainlist:

classifcation accuracy: 86.6426% #### Number of wrong guesses: 37 #### average of the error function: 0.0721451%

number of type 1 error: 37

number of type 2 error: 4

result on testlist:

classifcation accuracy: 86.3309% #### Number of wrong guesses: 19 #### average of the error function: 0.0870408%

number of type 1 error: 16

number of type 2 error: 7

epoch: 41

result on trainlist:

classifcation accuracy: 81.9495% #### Number of wrong guesses: 50 #### average of the error function: 0.0853911%

number of type 1 error: 47

number of type 2 error: 13

result on testlist:

classifcation accuracy: 79.1367% #### Number of wrong guesses: 29 #### average of the error function: 0.0988645%

number of type 1 error: 23

number of type 2 error: 12

epoch: 42

result on trainlist:

classifcation accuracy: 83.0325% #### Number of wrong guesses: 47 #### average of the error function: 0.0724006%

number of type 1 error: 47

number of type 2 error: 4

result on testlist:

classifcation accuracy: 79.8561% #### Number of wrong guesses: 28 #### average of the error function: 0.0906542%

number of type 1 error: 23

number of type 2 error: 9

epoch: 43

result on trainlist:

classifcation accuracy: 83.7545% #### Number of wrong guesses: 45 #### average of the error function: 0.0712235%

number of type 1 error: 45

number of type 2 error: 4

result on testlist:

classifcation accuracy: 81.295% #### Number of wrong guesses: 26 #### average of the error function: 0.0878922%

number of type 1 error: 21

number of type 2 error: 9

epoch: 44

result on trainlist:

classifcation accuracy: 84.8375% #### Number of wrong guesses: 42 #### average of the error function: 0.0722149%

number of type 1 error: 42

number of type 2 error: 4

result on testlist:

classifcation accuracy: 78.4173% #### Number of wrong guesses: 30 #### average of the error function: 0.0944225%

number of type 1 error: 24

number of type 2 error: 11

epoch: 45

result on trainlist:

classifcation accuracy: 82.6715% #### Number of wrong guesses: 48 #### average of the error function: 0.0734668%

number of type 1 error: 48

number of type 2 error: 3

result on testlist:

classifcation accuracy: 79.8561% #### Number of wrong guesses: 28 #### average of the error function: 0.0924186%

number of type 1 error: 27

number of type 2 error: 5

epoch: 46

result on trainlist:

classifcation accuracy: 83.0325% #### Number of wrong guesses: 47 #### average of the error function: 0.0703836%

number of type 1 error: 47

number of type 2 error: 4

result on testlist:

classifcation accuracy: 82.0144% #### Number of wrong guesses: 25 #### average of the error function: 0.0873948%

number of type 1 error: 22

number of type 2 error: 7

epoch: 47

result on trainlist:

classifcation accuracy: 84.8375% #### Number of wrong guesses: 42 #### average of the error function: 0.070415%

number of type 1 error: 42

number of type 2 error: 3

result on testlist:

classifcation accuracy: 83.4532% #### Number of wrong guesses: 23 #### average of the error function: 0.0863451%

number of type 1 error: 20

number of type 2 error: 6

epoch: 48

result on trainlist:

classifcation accuracy: 85.9206% #### Number of wrong guesses: 39 #### average of the error function: 0.0703499%

number of type 1 error: 39

number of type 2 error: 4

result on testlist:

classifcation accuracy: 82.7338% #### Number of wrong guesses: 24 #### average of the error function: 0.0883115%

number of type 1 error: 20

number of type 2 error: 7

epoch: 49

result on trainlist:

classifcation accuracy: 86.2816% #### Number of wrong guesses: 38 #### average of the error function: 0.0699099%

number of type 1 error: 38

number of type 2 error: 5

result on testlist:

classifcation accuracy: 84.1727% #### Number of wrong guesses: 22 #### average of the error function: 0.087722%

number of type 1 error: 18

number of type 2 error: 6

epoch: 50

result on trainlist:

classifcation accuracy: 85.5596% #### Number of wrong guesses: 40 #### average of the error function: 0.072293%

number of type 1 error: 40

number of type 2 error: 7

result on testlist:

classifcation accuracy: 82.7338% #### Number of wrong guesses: 24 #### average of the error function: 0.0903554%

number of type 1 error: 18

number of type 2 error: 11

epoch: 51

result on trainlist:

classifcation accuracy: 84.4765% #### Number of wrong guesses: 43 #### average of the error function: 0.0768786%

number of type 1 error: 41

number of type 2 error: 11

result on testlist:

classifcation accuracy: 83.4532% #### Number of wrong guesses: 23 #### average of the error function: 0.0910704%

number of type 1 error: 18

number of type 2 error: 14

epoch: 52

result on trainlist:

classifcation accuracy: 83.3935% #### Number of wrong guesses: 46 #### average of the error function: 0.0786148%

number of type 1 error: 43

number of type 2 error: 12

result on testlist:

classifcation accuracy: 82.7338% #### Number of wrong guesses: 24 #### average of the error function: 0.0897378%

number of type 1 error: 19

number of type 2 error: 13

epoch: 53

result on trainlist:

classifcation accuracy: 87.3646% #### Number of wrong guesses: 35 #### average of the error function: 0.0687811%

number of type 1 error: 35

number of type 2 error: 4

result on testlist:

classifcation accuracy: 86.3309% #### Number of wrong guesses: 19 #### average of the error function: 0.0863826%

number of type 1 error: 16

number of type 2 error: 10

epoch: 54

result on trainlist:

classifcation accuracy: 45.4874% #### Number of wrong guesses: 151 #### average of the error function: 0.233395%

number of type 1 error: 75

number of type 2 error: 142

result on testlist:

classifcation accuracy: 43.8849% #### Number of wrong guesses: 78 #### average of the error function: 0.259297%

number of type 1 error: 40

number of type 2 error: 77

epoch: 55

result on trainlist:

classifcation accuracy: 87.7256% #### Number of wrong guesses: 34 #### average of the error function: 0.067687%

number of type 1 error: 34

number of type 2 error: 6

result on testlist:

classifcation accuracy: 85.6115% #### Number of wrong guesses: 20 #### average of the error function: 0.0830095%

number of type 1 error: 17

number of type 2 error: 8

epoch: 56

result on trainlist:

classifcation accuracy: 87.7256% #### Number of wrong guesses: 34 #### average of the error function: 0.0668679%

number of type 1 error: 34

number of type 2 error: 6

result on testlist:

classifcation accuracy: 86.3309% #### Number of wrong guesses: 19 #### average of the error function: 0.082829%

number of type 1 error: 16

number of type 2 error: 8

epoch: 57

result on trainlist:

classifcation accuracy: 88.0866% #### Number of wrong guesses: 33 #### average of the error function: 0.0649382%

number of type 1 error: 33

number of type 2 error: 5

result on testlist:

classifcation accuracy: 84.8921% #### Number of wrong guesses: 21 #### average of the error function: 0.0861777%

number of type 1 error: 18

number of type 2 error: 9

epoch: 58

result on trainlist:

classifcation accuracy: 95.6679% #### Number of wrong guesses: 12 #### average of the error function: 0.0600162%

number of type 1 error: 12

number of type 2 error: 4

result on testlist:

classifcation accuracy: 87.7698% #### Number of wrong guesses: 17 #### average of the error function: 0.089061%

number of type 1 error: 14

number of type 2 error: 11

epoch: 59

result on trainlist:

classifcation accuracy: 97.1119% #### Number of wrong guesses: 8 #### average of the error function: 0.0583245%

number of type 1 error: 8

number of type 2 error: 6

result on testlist:

classifcation accuracy: 87.7698% #### Number of wrong guesses: 17 #### average of the error function: 0.0880056%

number of type 1 error: 12

number of type 2 error: 13

epoch: 60

result on trainlist:

classifcation accuracy: 98.556% #### Number of wrong guesses: 4 #### average of the error function: 0.0548854%

number of type 1 error: 4

number of type 2 error: 3

result on testlist:

classifcation accuracy: 89.9281% #### Number of wrong guesses: 14 #### average of the error function: 0.0835907%

number of type 1 error: 10

number of type 2 error: 10

epoch: 61

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.053131%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 90.6475% #### Number of wrong guesses: 13 #### average of the error function: 0.0804424%

number of type 1 error: 9

number of type 2 error: 10

epoch: 62

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0521983%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 90.6475% #### Number of wrong guesses: 13 #### average of the error function: 0.080426%

number of type 1 error: 9

number of type 2 error: 12

epoch: 63

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0514137%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 90.6475% #### Number of wrong guesses: 13 #### average of the error function: 0.080738%

number of type 1 error: 9

number of type 2 error: 12

epoch: 64

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0508941%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 90.6475% #### Number of wrong guesses: 13 #### average of the error function: 0.0811109%

number of type 1 error: 9

number of type 2 error: 12

epoch: 65

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0505113%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 89.9281% #### Number of wrong guesses: 14 #### average of the error function: 0.0820874%

number of type 1 error: 10

number of type 2 error: 11

epoch: 66

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0506173%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 88.4892% #### Number of wrong guesses: 16 #### average of the error function: 0.0841834%

number of type 1 error: 11

number of type 2 error: 11

epoch: 67

result on trainlist:

classifcation accuracy: 98.556% #### Number of wrong guesses: 4 #### average of the error function: 0.0506329%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 88.4892% #### Number of wrong guesses: 16 #### average of the error function: 0.0830772%

number of type 1 error: 11

number of type 2 error: 11

epoch: 68

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0508788%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 89.2086% #### Number of wrong guesses: 15 #### average of the error function: 0.0786031%

number of type 1 error: 10

number of type 2 error: 10

epoch: 69

result on trainlist:

classifcation accuracy: 98.1949% #### Number of wrong guesses: 5 #### average of the error function: 0.0500195%

number of type 1 error: 3

number of type 2 error: 4

result on testlist:

classifcation accuracy: 88.4892% #### Number of wrong guesses: 16 #### average of the error function: 0.0825631%

number of type 1 error: 11

number of type 2 error: 12

epoch: 70

result on trainlist:

classifcation accuracy: 98.1949% #### Number of wrong guesses: 5 #### average of the error function: 0.0518809%

number of type 1 error: 4

number of type 2 error: 5

result on testlist:

classifcation accuracy: 92.8058% #### Number of wrong guesses: 10 #### average of the error function: 0.0722273%

number of type 1 error: 8

number of type 2 error: 8

epoch: 71

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0478009%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 92.0863% #### Number of wrong guesses: 11 #### average of the error function: 0.0715132%

number of type 1 error: 9

number of type 2 error: 8

epoch: 72

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0470061%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 90.6475% #### Number of wrong guesses: 13 #### average of the error function: 0.0760937%

number of type 1 error: 11

number of type 2 error: 9

epoch: 73

result on trainlist:

classifcation accuracy: 98.556% #### Number of wrong guesses: 4 #### average of the error function: 0.0465218%

number of type 1 error: 3

number of type 2 error: 4

result on testlist:

classifcation accuracy: 92.0863% #### Number of wrong guesses: 11 #### average of the error function: 0.0728775%

number of type 1 error: 8

number of type 2 error: 9

epoch: 74

result on trainlist:

classifcation accuracy: 98.556% #### Number of wrong guesses: 4 #### average of the error function: 0.0463496%

number of type 1 error: 3

number of type 2 error: 4

result on testlist:

classifcation accuracy: 89.9281% #### Number of wrong guesses: 14 #### average of the error function: 0.0788917%

number of type 1 error: 10

number of type 2 error: 12

epoch: 75

result on trainlist:

classifcation accuracy: 98.556% #### Number of wrong guesses: 4 #### average of the error function: 0.0476353%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 91.3669% #### Number of wrong guesses: 12 #### average of the error function: 0.0730154%

number of type 1 error: 7

number of type 2 error: 11

epoch: 76

result on trainlist:

classifcation accuracy: 93.5018% #### Number of wrong guesses: 18 #### average of the error function: 0.0557834%

number of type 1 error: 17

number of type 2 error: 3

result on testlist:

classifcation accuracy: 84.8921% #### Number of wrong guesses: 21 #### average of the error function: 0.0880145%

number of type 1 error: 17

number of type 2 error: 11

epoch: 77

result on trainlist:

classifcation accuracy: 98.1949% #### Number of wrong guesses: 5 #### average of the error function: 0.047727%

number of type 1 error: 4

number of type 2 error: 5

result on testlist:

classifcation accuracy: 91.3669% #### Number of wrong guesses: 12 #### average of the error function: 0.0768761%

number of type 1 error: 8

number of type 2 error: 10

epoch: 78

result on trainlist:

classifcation accuracy: 98.556% #### Number of wrong guesses: 4 #### average of the error function: 0.0454267%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 91.3669% #### Number of wrong guesses: 12 #### average of the error function: 0.073718%

number of type 1 error: 7

number of type 2 error: 12

epoch: 79

result on trainlist:

classifcation accuracy: 97.8339% #### Number of wrong guesses: 6 #### average of the error function: 0.0493682%

number of type 1 error: 3

number of type 2 error: 6

result on testlist:

classifcation accuracy: 92.8058% #### Number of wrong guesses: 10 #### average of the error function: 0.0690833%

number of type 1 error: 5

number of type 2 error: 10

epoch: 80

result on trainlist:

classifcation accuracy: 98.1949% #### Number of wrong guesses: 5 #### average of the error function: 0.046017%

number of type 1 error: 3

number of type 2 error: 4

result on testlist:

classifcation accuracy: 92.0863% #### Number of wrong guesses: 11 #### average of the error function: 0.0681191%

number of type 1 error: 6

number of type 2 error: 8

epoch: 81

result on trainlist:

classifcation accuracy: 97.8339% #### Number of wrong guesses: 6 #### average of the error function: 0.0473984%

number of type 1 error: 4

number of type 2 error: 6

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.063678%

number of type 1 error: 5

number of type 2 error: 8

epoch: 82

result on trainlist:

classifcation accuracy: 98.556% #### Number of wrong guesses: 4 #### average of the error function: 0.04462%

number of type 1 error: 3

number of type 2 error: 4

result on testlist:

classifcation accuracy: 91.3669% #### Number of wrong guesses: 12 #### average of the error function: 0.0701293%

number of type 1 error: 5

number of type 2 error: 12

epoch: 83

result on trainlist:

classifcation accuracy: 92.7798% #### Number of wrong guesses: 20 #### average of the error function: 0.060475%

number of type 1 error: 14

number of type 2 error: 8

result on testlist:

classifcation accuracy: 86.3309% #### Number of wrong guesses: 19 #### average of the error function: 0.0920225%

number of type 1 error: 15

number of type 2 error: 14

epoch: 84

result on trainlist:

classifcation accuracy: 98.1949% #### Number of wrong guesses: 5 #### average of the error function: 0.0467433%

number of type 1 error: 3

number of type 2 error: 5

result on testlist:

classifcation accuracy: 89.9281% #### Number of wrong guesses: 14 #### average of the error function: 0.0787175%

number of type 1 error: 7

number of type 2 error: 13

epoch: 85

result on trainlist:

classifcation accuracy: 98.556% #### Number of wrong guesses: 4 #### average of the error function: 0.0440758%

number of type 1 error: 3

number of type 2 error: 4

result on testlist:

classifcation accuracy: 92.0863% #### Number of wrong guesses: 11 #### average of the error function: 0.073347%

number of type 1 error: 7

number of type 2 error: 10

epoch: 86

result on trainlist:

classifcation accuracy: 98.556% #### Number of wrong guesses: 4 #### average of the error function: 0.0437037%

number of type 1 error: 3

number of type 2 error: 4

result on testlist:

classifcation accuracy: 92.0863% #### Number of wrong guesses: 11 #### average of the error function: 0.0714245%

number of type 1 error: 7

number of type 2 error: 10

epoch: 87

result on trainlist:

classifcation accuracy: 98.556% #### Number of wrong guesses: 4 #### average of the error function: 0.0440355%

number of type 1 error: 3

number of type 2 error: 4

result on testlist:

classifcation accuracy: 92.8058% #### Number of wrong guesses: 10 #### average of the error function: 0.06753%

number of type 1 error: 7

number of type 2 error: 9

epoch: 88

result on trainlist:

classifcation accuracy: 98.556% #### Number of wrong guesses: 4 #### average of the error function: 0.0437053%

number of type 1 error: 3

number of type 2 error: 4

result on testlist:

classifcation accuracy: 92.0863% #### Number of wrong guesses: 11 #### average of the error function: 0.0715495%

number of type 1 error: 6

number of type 2 error: 10

epoch: 89

result on trainlist:

classifcation accuracy: 98.556% #### Number of wrong guesses: 4 #### average of the error function: 0.0435825%

number of type 1 error: 3

number of type 2 error: 4

result on testlist:

classifcation accuracy: 91.3669% #### Number of wrong guesses: 12 #### average of the error function: 0.07361%

number of type 1 error: 7

number of type 2 error: 11

epoch: 90

result on trainlist:

classifcation accuracy: 98.556% #### Number of wrong guesses: 4 #### average of the error function: 0.0434389%

number of type 1 error: 3

number of type 2 error: 4

result on testlist:

classifcation accuracy: 90.6475% #### Number of wrong guesses: 13 #### average of the error function: 0.0742572%

number of type 1 error: 7

number of type 2 error: 11

epoch: 91

result on trainlist:

classifcation accuracy: 98.556% #### Number of wrong guesses: 4 #### average of the error function: 0.0431891%

number of type 1 error: 3

number of type 2 error: 4

result on testlist:

classifcation accuracy: 92.0863% #### Number of wrong guesses: 11 #### average of the error function: 0.0706081%

number of type 1 error: 7

number of type 2 error: 10

epoch: 92

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.043169%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 92.0863% #### Number of wrong guesses: 11 #### average of the error function: 0.0727166%

number of type 1 error: 7

number of type 2 error: 11

epoch: 93

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.04279%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 91.3669% #### Number of wrong guesses: 12 #### average of the error function: 0.0734265%

number of type 1 error: 7

number of type 2 error: 11

epoch: 94

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0426724%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 92.0863% #### Number of wrong guesses: 11 #### average of the error function: 0.0721924%

number of type 1 error: 7

number of type 2 error: 11

epoch: 95

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0425574%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 92.0863% #### Number of wrong guesses: 11 #### average of the error function: 0.0705404%

number of type 1 error: 7

number of type 2 error: 10

epoch: 96

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0424721%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 92.0863% #### Number of wrong guesses: 11 #### average of the error function: 0.0705721%

number of type 1 error: 7

number of type 2 error: 10

epoch: 97

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0423081%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 92.0863% #### Number of wrong guesses: 11 #### average of the error function: 0.0706195%

number of type 1 error: 7

number of type 2 error: 10

epoch: 98

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0423203%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 92.8058% #### Number of wrong guesses: 10 #### average of the error function: 0.0679572%

number of type 1 error: 7

number of type 2 error: 10

epoch: 99

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0421648%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 92.8058% #### Number of wrong guesses: 10 #### average of the error function: 0.06729%

number of type 1 error: 7

number of type 2 error: 10

Saving 15360x20x20 network to 'network.net'

epoch: 100

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0416015%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 92.8058% #### Number of wrong guesses: 10 #### average of the error function: 0.0660095%

number of type 1 error: 7

number of type 2 error: 9

epoch: 101

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0416243%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0660198%

number of type 1 error: 6

number of type 2 error: 8

epoch: 102

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0412799%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0682966%

number of type 1 error: 6

number of type 2 error: 10

epoch: 103

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0412577%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 92.8058% #### Number of wrong guesses: 10 #### average of the error function: 0.0631097%

number of type 1 error: 7

number of type 2 error: 9

epoch: 104

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0415881%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0608529%

number of type 1 error: 7

number of type 2 error: 7

epoch: 105

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0411306%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.062664%

number of type 1 error: 6

number of type 2 error: 8

epoch: 106

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0409903%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0635312%

number of type 1 error: 6

number of type 2 error: 9

epoch: 107

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0407433%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0648384%

number of type 1 error: 6

number of type 2 error: 7

epoch: 108

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0408613%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0678768%

number of type 1 error: 6

number of type 2 error: 9

epoch: 109

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0407863%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0674344%

number of type 1 error: 6

number of type 2 error: 9

epoch: 110

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0407181%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0665611%

number of type 1 error: 6

number of type 2 error: 9

epoch: 111

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.040468%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0660796%

number of type 1 error: 6

number of type 2 error: 9

epoch: 112

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0405242%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0612448%

number of type 1 error: 5

number of type 2 error: 8

epoch: 113

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.040421%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0610508%

number of type 1 error: 5

number of type 2 error: 8

epoch: 114

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0404488%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0600301%

number of type 1 error: 5

number of type 2 error: 8

epoch: 115

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0403608%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0600623%

number of type 1 error: 5

number of type 2 error: 7

epoch: 116

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0402126%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.060024%

number of type 1 error: 5

number of type 2 error: 7

epoch: 117

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0401363%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0600274%

number of type 1 error: 5

number of type 2 error: 7

epoch: 118

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0401737%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0597044%

number of type 1 error: 6

number of type 2 error: 7

epoch: 119

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0401009%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0598778%

number of type 1 error: 6

number of type 2 error: 7

epoch: 120

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0400445%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0597426%

number of type 1 error: 6

number of type 2 error: 7

epoch: 121

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0399951%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0604698%

number of type 1 error: 6

number of type 2 error: 7

epoch: 122

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0398729%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0612018%

number of type 1 error: 6

number of type 2 error: 9

epoch: 123

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0396323%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0637573%

number of type 1 error: 6

number of type 2 error: 9

epoch: 124

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0398791%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0601906%

number of type 1 error: 5

number of type 2 error: 8

epoch: 125

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.039817%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0595617%

number of type 1 error: 5

number of type 2 error: 8

epoch: 126

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0400136%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0594825%

number of type 1 error: 5

number of type 2 error: 8

epoch: 127

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0396632%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0594054%

number of type 1 error: 5

number of type 2 error: 8

epoch: 128

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0396348%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0592265%

number of type 1 error: 5

number of type 2 error: 8

epoch: 129

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0395907%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0591523%

number of type 1 error: 5

number of type 2 error: 8

epoch: 130

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0395151%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.059169%

number of type 1 error: 5

number of type 2 error: 8

epoch: 131

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0394795%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0587677%

number of type 1 error: 5

number of type 2 error: 8

epoch: 132

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0393256%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0591115%

number of type 1 error: 5

number of type 2 error: 8

epoch: 133

result on trainlist:

classifcation accuracy: 98.1949% #### Number of wrong guesses: 5 #### average of the error function: 0.0403087%

number of type 1 error: 5

number of type 2 error: 3

result on testlist:

classifcation accuracy: 92.0863% #### Number of wrong guesses: 11 #### average of the error function: 0.0633254%

number of type 1 error: 7

number of type 2 error: 9

epoch: 134

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0399966%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0585429%

number of type 1 error: 5

number of type 2 error: 7

epoch: 135

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0394943%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0582058%

number of type 1 error: 5

number of type 2 error: 8

epoch: 136

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0394559%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0584387%

number of type 1 error: 5

number of type 2 error: 8

epoch: 137

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0394016%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0586995%

number of type 1 error: 5

number of type 2 error: 8

epoch: 138

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0393362%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0588776%

number of type 1 error: 5

number of type 2 error: 8

epoch: 139

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0392622%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0588839%

number of type 1 error: 5

number of type 2 error: 8

epoch: 140

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0392282%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0586215%

number of type 1 error: 5

number of type 2 error: 8

epoch: 141

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0392196%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0588689%

number of type 1 error: 5

number of type 2 error: 8

epoch: 142

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0391185%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0587793%

number of type 1 error: 5

number of type 2 error: 8

epoch: 143

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0390869%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0587615%

number of type 1 error: 5

number of type 2 error: 8

epoch: 144

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0390422%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0588051%

number of type 1 error: 5

number of type 2 error: 8

epoch: 145

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0390426%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0585635%

number of type 1 error: 4

number of type 2 error: 8

epoch: 146

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0390131%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0588145%

number of type 1 error: 4

number of type 2 error: 8

epoch: 147

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.038932%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.058789%

number of type 1 error: 4

number of type 2 error: 8

epoch: 148

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.038903%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0587413%

number of type 1 error: 4

number of type 2 error: 8

epoch: 149

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0389008%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0589632%

number of type 1 error: 4

number of type 2 error: 9

epoch: 150

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0387623%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0591549%

number of type 1 error: 4

number of type 2 error: 9

epoch: 151

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0386411%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0597906%

number of type 1 error: 5

number of type 2 error: 9

epoch: 152

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0387168%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0604987%

number of type 1 error: 5

number of type 2 error: 9

epoch: 153

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0387418%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0605111%

number of type 1 error: 5

number of type 2 error: 9

epoch: 154

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0387405%

number of type 1 error: 3

number of type 2 error: 1

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0612203%

number of type 1 error: 5

number of type 2 error: 9

epoch: 155

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0392203%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0579979%

number of type 1 error: 4

number of type 2 error: 9

epoch: 156

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0389371%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0592329%

number of type 1 error: 5

number of type 2 error: 9

epoch: 157

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0390062%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0592876%

number of type 1 error: 4

number of type 2 error: 9

epoch: 158

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0389367%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0603724%

number of type 1 error: 5

number of type 2 error: 8

epoch: 159

result on trainlist:

classifcation accuracy: 98.556% #### Number of wrong guesses: 4 #### average of the error function: 0.0395259%

number of type 1 error: 3

number of type 2 error: 4

result on testlist:

classifcation accuracy: 92.0863% #### Number of wrong guesses: 11 #### average of the error function: 0.0664576%

number of type 1 error: 6

number of type 2 error: 12

epoch: 160

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0386882%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0608853%

number of type 1 error: 5

number of type 2 error: 9

epoch: 161

result on trainlist:

classifcation accuracy: 98.556% #### Number of wrong guesses: 4 #### average of the error function: 0.0424315%

number of type 1 error: 4

number of type 2 error: 3

result on testlist:

classifcation accuracy: 92.8058% #### Number of wrong guesses: 10 #### average of the error function: 0.063139%

number of type 1 error: 8

number of type 2 error: 7

epoch: 162

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.038522%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.964% #### Number of wrong guesses: 7 #### average of the error function: 0.0609547%

number of type 1 error: 5

number of type 2 error: 9

epoch: 163

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0384122%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 93.5252% #### Number of wrong guesses: 9 #### average of the error function: 0.0662597%

number of type 1 error: 6

number of type 2 error: 11

epoch: 164

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0385933%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.057604%

number of type 1 error: 5

number of type 2 error: 9

epoch: 165

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0384921%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0583518%

number of type 1 error: 5

number of type 2 error: 8

epoch: 166

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0384821%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0625042%

number of type 1 error: 5

number of type 2 error: 10

epoch: 167

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0384368%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0593041%

number of type 1 error: 5

number of type 2 error: 9

epoch: 168

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0379996%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0588047%

number of type 1 error: 5

number of type 2 error: 9

epoch: 169

result on trainlist:

classifcation accuracy: 88.8087% #### Number of wrong guesses: 31 #### average of the error function: 0.0644995%

number of type 1 error: 31

number of type 2 error: 3

result on testlist:

classifcation accuracy: 87.0504% #### Number of wrong guesses: 18 #### average of the error function: 0.0716605%

number of type 1 error: 17

number of type 2 error: 7

epoch: 170

result on trainlist:

classifcation accuracy: 89.1697% #### Number of wrong guesses: 30 #### average of the error function: 0.0588879%

number of type 1 error: 30

number of type 2 error: 3

result on testlist:

classifcation accuracy: 86.3309% #### Number of wrong guesses: 19 #### average of the error function: 0.0719767%

number of type 1 error: 18

number of type 2 error: 6

epoch: 171

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.039108%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.964% #### Number of wrong guesses: 7 #### average of the error function: 0.0566076%

number of type 1 error: 6

number of type 2 error: 6

epoch: 172

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0390381%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.964% #### Number of wrong guesses: 7 #### average of the error function: 0.0560852%

number of type 1 error: 6

number of type 2 error: 7

epoch: 173

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0382565%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.05637%

number of type 1 error: 6

number of type 2 error: 7

epoch: 174

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0391285%

number of type 1 error: 3

number of type 2 error: 2

result on testlist:

classifcation accuracy: 94.964% #### Number of wrong guesses: 7 #### average of the error function: 0.0556142%

number of type 1 error: 6

number of type 2 error: 7

epoch: 175

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0383232%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0573253%

number of type 1 error: 6

number of type 2 error: 8

epoch: 176

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0379837%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 94.2446% #### Number of wrong guesses: 8 #### average of the error function: 0.0565019%

number of type 1 error: 6

number of type 2 error: 8

epoch: 177

result on trainlist:

classifcation accuracy: 98.917% #### Number of wrong guesses: 3 #### average of the error function: 0.0383809%

number of type 1 error: 3

number of type 2 error: 3

result on testlist:

classifcation accuracy: 95.6835% #### Number of wrong guesses: 6 #### average of the error function: 0.0528218%

number of type 1 error: 5

number of type 2 error: 5

Test 1：

classifcation accuracy: 95.6835% #### Number of wrong guesses: 6 #### average of the error function: 0.0528218%

number of type 1 error: 5

number of type 2 error: 5

Test 2：

classifcation accuracy: 93.75% #### Number of wrong guesses: 13 #### average of the error function: 0.0610499%

number of type 1 error: 10

number of type 2 error: 10

Saving 15360x20x20 network to 'network.net'