

	Número de camadas escondidas	Número de neurónios	Funções de ativação	Função de treino	Divisão dos exemplos	Número de Épocas	Precisão Global	Precisão Teste	Melhor Teste
Configuração por defeito	1	10	tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	98,8	95,7	

Alínea A) ii. - Mudar topologia - Start

Conf1	1	10	tansig, purelin	trainlm	100% Treino	20	100.00%	NaN	
Conf2	1	30	tansig, purelin	trainlm	100% Treino	20	100.00%	NaN	
Conf3	2	10, 10	tansig, tansig, purelin	trainlm	100% Treino	20	100.00	NaN	
Conf4	2	30, 30	tansig, tansig, purelin	trainlm	100% Treino	20	100.00	NaN	
Conf5	2	10, 30	tansig, tansig, purelin	trainlm	100% Treino	20	100.00	NaN	

Alínea A) iii. - Mudar topologia - Start

Conf1	1	10	tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	80.00% (±6.67)	40.00% (±0.00)	40.00%
Conf2	1	30	tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	79.33% (±3.65)	28.00% (±22.80)	60.00%
Conf3	2	10, 10	tansig, tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	66.00% (±14.79)	28.00% (±17.89)	40.00%

Conf4	2	30, 30	tansig, tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	78.67% (± 1.83)	32.00% (± 10.95)	40.00%
Conf5	2	10, 30	tansig, tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	76.00% (± 6.83)	32.00% (± 30.33)	80.00%

Alínea B) - diferentes topologias: número de neurónios e número de camadas - Train

Conf1	1	10	tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	90.33% (± 2.32)	68.44% (± 10.93)	86.67%
Conf2	1	30	tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	90.47% (± 0.80)	63.11% (± 6.96)	73.33%
Conf3	2	10, 10	tansig, tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	89.53% (± 2.12)	70.67% (± 4.82)	77.78%
Conf4	2	30, 30	tansig, tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	91.13% (± 1.02)	66.67% (± 4.16)	71.11%
Conf5	2	10, 30	tansig, tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	89.20% (± 2.58)	60.44% (± 9.08)	75.56%

Alínea B) - diferentes funções de ativação - Train

Conf1	1	10	logsig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	90.47% (± 2.91)	72.89% (± 3.98)	77.78%
Conf2	1	10	tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	91.33% (± 2.35)	69.33% (± 6.74)	77.78%
Conf3	1	10	purelin, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	71.07% (± 24.29)	57.33% (± 15.51)	77.78%
Conf4	1	10	softmax, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	65.80% (± 20.21)	52.44% (± 16.67)	73.33%

Alínea B) - diferentes funções de treino - Train

Conf1	1	10	tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	89.07% (±2.13)	68.44% (±3.65)	71.11%
Conf2	1	10	tansig, purelin	traingd	dividerand = {0.7, 0.15, 0.15}	20	21.40% (±5.02)	23.56% (±6.40)	33.33%
Conf3	1	10	tansig, purelin	trainscg	dividerand = {0.7, 0.15, 0.15}	20	46.60% (±3.52)	40.00% (±3.51)	44.44%
Conf4	1	10	tansig, purelin	trainrp	dividerand = {0.7, 0.15, 0.15}	20	25.13% (±7.73)	21.33% (±10.95)	35.56%

Alínea B) - diferentes rácios de divisão em treino/validação/teste - Train

Conf1	1	10	tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	89.07% (±2.13)	68.44% (±3.65)	71.11%
Conf2	1	10	tansig, purelin	trainlm	dividerand = {0.8, 0.1, 0.1}	20	93.67% (±1.13)	74.67% (±7.30)	80.00%
Conf3	1	10	tansig, purelin	trainlm	dividerand = {0.6, 0.2, 0.2}	20	86.00% (±1.75)	64.33% (±5.35)	68.33%
Conf4	1	10	tansig, purelin	trainlm	dividerand = {0.4, 0.3, 0.3}	20	76.53% (±1.35)	61.56% (±4.94)	68.89%

Mudar número de épocas - Train

Conf1	1	10	tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	87.38% (±8.13)	66.44% (±10.06)	72.88%
Conf2	1	10	tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	40	88.67% (±4.58)	65.76% (±7.71)	71.19%
Conf3	1	10	tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	60	89.93% (±1.48)	68.00% (±5.12)	73.33%
Conf4	1	10	tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	100	90.60% (±1.75)	64.00% (±6.36)	73.33%

Mudar a pasta de imagens para treino								
Conf1 - Start	1	10	tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	73.33% (±12.69)	32.00% (±17.89)
Conf2 - Test	1	10	tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	85.00% (±2.64)	55.56% (±11.11)
Conf3 - Train	1	10	tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	89.40% (±1.42)	63.11% (±3.37)
Conf4 - All	1	10	tansig, purelin	trainlm	dividerand = {0.7, 0.15, 0.15}	20	89.03% (±2.47)	68.47% (±7.91)

60.00%

66.67%

69.67%

79.66%