

## Appendice A - Dati relativi alla fase di addestramento

9 giugno 2020

Tabella 1: Definizione dei parametri dei cicli di addestramento per il metodo classico con la funzione definita a tratti

Ciclo	$\sigma$	$N$
1	$\frac{1}{2}$	208
2	$\frac{1}{3}$	404
3	$\frac{1}{4}$	816
4	$\frac{1}{5}$	1695
5	$\frac{1}{6}$	3205
6	$\frac{1}{7}$	6225

Tabella 2: Neuroni attivati per le reti della prima versione

	$N = 1019$	$N = 2063$	$N = 379$	$N = 294$	$N = 251$	$N = 3071$	$N = 4089$
som1	2/225	3/225	2/225	2/225	2/225	4/225	5/225
som2	4/225	5/225	4/225	4/225	4/225	7/225	6/225
som3	3/225	4/225	2/225	2/225	2/225	4/225	5/225
som4	6/225	7/225	6/225	6/225	5/225	9/225	8/225
som5	4/225	5/225	2/225	4/225	3/225	9/225	5/225
som6	9/225	13/225	6/225	5/225	4/225	14/225	13/225

Tabella 3: Reti prodotte con il metodo classico usando la funzione gaussiana

	$\sigma_0$	<i>Passi totali</i>
somg1	0.5	5415
somg2	3.5	1524
somg3	1.5	3219
somg4	4.5	1022
somg5	5.5	621
somg6	6.5	287

Tabella 4: Reti prodotte con il metodo classico usando la funzione mista polinomiale gaussiana

	$\sigma_0$	<i>Passi totali</i>
somp1	0.5	5415
somp2	1.0	4029
somp3	2.5	2197
somp4	4.5	1022
somp5	5.5	621
somp6	6.5	287
somp7	3.5	1524
somp8	7.0	138
somp9	6.0	447
somp10	6.7	226
somp11	6.6	256
somp12	6.4	318

Tabella 5: Neuroni inattivi per le reti della seconda versione relativi alla funzione gaussiana

	$T = 0.1$	$T = 0.6$	$T = 1.1$	$T = 1.6$	$T = 1.9$	$T = 2.1$	$T = 2, 6$	$T = 3, 1$	$T = 3, 6$	$T = 4, 1$	$T = 4, 6$	$T = 5, 0$
somg1	223/225	223/225	217/225	207/225	188/225	180/225	99/225	105/225	105/225	110/225	118/225	120/225
somg2	223/225	223/225	221/225	217/225	202/225	182/225	107/225	115/225	124/225	140/225	127/225	139/225
somg3	223/225	223/225	223/225	223/225	221/225	216/225	128/225	170/225	176/225	179/225	182/225	189/225
somg4	223/225	223/225	223/225	223/225	223/225	221/225	158/225	186/225	195/225	199/225	204/225	201/225
somg5	223/225	223/225	223/225	223/225	220/225	206/225	201/225	213/225	216/225	215/225	218/225	218/225
somg6	223/225	223/225	223/225	223/225	223/225	219/225	207/225	219/225	220/225	222/225	223/225	224/225

Tabella 6: Neuroni inattivi per le reti della seconda versione relativi alla funzione mista polinomiale gaussiana

	$T = 0.1$	$T = 0.6$	$T = 1.1$	$T = 1.6$	$T = 1.9$	$T = 2.1$	$T = 2, 6$	$T = 3, 1$	$T = 3, 6$	$T = 4, 1$	$T = 4, 6$	$T = 5, 0$
somp1	223/225	223/225	217/225	207/225	188/225	180/225	99/225	105/225	105/225	110/225	118/225	120/225
somp2	224/225	224/225	224/225	224/225	224/225	224/225	224/225	224/225	224/225	224/225	224/225	224/225
somp3	223/225	223/225	223/225	223/225	223/225	223/225	221/225	222/225	224/225	223/225	224/225	224/225
somp4	223/225	223/225	223/225	223/225	221/225	218/225	211/225	215/225	216/225	217/225	216/225	217/225
somp5	223/225	223/225	223/225	223/225	221/225	218/225	197/225	200/225	202/225	203/225	204/225	207/225
somp6	223/225	223/225	222/225	219/225	215/225	209/225	171/225	188/225	193/225	198/225	197/225	198/225
somp7	223/225	223/225	222/225	220/225	217/225	212/225	208/225	219/225	221/225	221/225	221/225	221/225
somp8	223/225	223/225	223/225	222/225	220/225	216/225	203/225	207/225	209/225	212/225	213/225	212/225
somp9	223/225	223/225	222/225	223/217	208/225	205/225	198/225	211/225	214/225	212/225	214/225	215/225
somp10	223/225	223/225	223/225	223/225	223/225	219/225	207/225	219/225	220/225	222/225	223/225	224/225
somp11	223/225	223/225	223/225	223/225	220/225	215/225	195/225	209/225	200/225	215/225	213/225	214/225
somp12	223/225	223/225	223/225	223/225	223/225	218/225	176/225	187/225	91/225	200/225	200/225	196/225

Tabella 7: Reti prodotte con l'algoritmo di addestramento alternativo

	$N$	numero di cicli	valori di $\sigma$
-] soma1	6225	7	$\sigma = 7.5, 6.5, 5.5, 4.5, 3.5, 2.5, 1.5$
soma2	6225	6	$\sigma = 7.5, 6.5, 5.5, 4.5, 3.5, 2.5$
soma3	6225	5	$\sigma = 7.5, 6.5, 5.5, 4.5, 3.5$
soma4	6225	4	$\sigma = 7.5, 6.5, 5.5, 4.5$
soma5	3000	7	$\sigma = 7.5, 6.5, 5.5, 4.5, 3.5, 2.5, 1.5$
soma6	3000	6	$\sigma = 7.5, 6.5, 5.5, 4.5, 3.5, 2.5$
soma7	3000	5	$\sigma = 7.5, 6.5, 5.5, 4.5, 3.5$
soma8	3000	4	$\sigma = 7.5, 6.5, 5.5, 4.5$
soma9	1400	7	$\sigma = 7.5, 6.5, 5.5, 4.5, 3.5, 2.5, 1.5$
soma10	1400	6	$\sigma = 7.5, 6.5, 5.5, 4.5, 3.5, 2.5$
soma11	1400	5	$\sigma = 7.5, 6.5, 5.5, 4.5, 3.5$
soma12	1400	4	$\sigma = 7.5, 6.5, 5.5, 4.5$
soma13	220	7	$\sigma = 7.5, 6.5, 5.5, 4.5, 3.5, 2.5, 1.5$
soma14	220	6	$\sigma = 7.5, 6.5, 5.5, 4.5, 3.5, 2.5$
soma15	220	5	$\sigma = 7.5, 6.5, 5.5, 4.5, 3.5$
soma16	220	4	$\sigma = 7.5, 6.5, 5.5, 4.5$