Apêndices

Apêndice A

Resultados dos hiperparâmetros

As Tabelas a seguir mostram as configurações de hiperparâmetros e o resultado de cada um deles. O título das Tabelas são organizados da seguinte forma para cada estratégia:

1. Estratégia muitos para muitos (m-x-m): "Hiperparâmetros: A_data_B_C)"

2. Estratégia um para um (m-x-1): "Hiperparâmetros: A_data_B_C_D)"

3. Estratégia um para um (1-x-1): "Hiperparâmetros: A_data_B_C_E_D)"

Onde "A" é o conjunto de dados, "B" é a técnica de regressão utilizada, "C" é estratégia utilizada, "D" é a variável alvo e "E" é a variável de entrada ou característica.

Tabela 14: Hiperparâmetros: teddy_data_dt_m_x_m

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.005487	0.475585	random	10	poisson
2	0.006968	0.462734	random	10	squared_error
3	0.004436	0.460222	best	5	poisson
4	0.005265	0.459981	random	10	absolute_error
5	0.009840	0.458167	random	10	friedman_mse
6	0.008981	0.449299	best	10	absolute_error
7	0.016753	0.446258	best	10	poisson
8	0.004110	0.443649	best	5	absolute_error
9	0.009307	0.440920	best	10	squared_error
10	0.014106	0.432675	best	10	friedman_mse
11	0.004605	0.432028	best	5	squared_error
12	0.006529	0.424305	best	5	friedman_mse
13	0.001972	0.421276	random	5	poisson
14	0.014450	0.412599	random	5	friedman_mse
15	0.013329	0.412483	random	5	squared_error
16	0.002610	0.404067	random	5	absolute_error
17	0.014230	0.371830	random	15	friedman_mse
18	0.009116	0.369082	random	15	absolute_error
19	0.015470	0.356887	random	15	squared_error
20	0.009364	0.350998	random	15	poisson
21	0.018053	0.311062	best	15	friedman_mse
22	0.011315	0.289192	best	15	absolute_error
23	0.012027	0.282750	best	15	squared_error
24	0.017734	0.269028	best	15	poisson

Tabela 15: Hiperparâmetros: teddy_data_knn_m_x_m

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.007479	0.476705	uniform	2	6	kd_tree
1	1	0.007479	0.476705	uniform	2	6	brute
2	1	0.007479	0.476705	uniform	2	6	ball_tree
3	4	0.006665	0.475830	uniform	3	6	ball_tree
4	4	0.006665	0.475830	uniform	3	6	kd_tree
5	4	0.006665	0.475830	uniform	3	6	brute
6	7	0.007292	0.474908	distance	2	6	brute
7	8	0.007292	0.474908	distance	2	6	kd_tree
8	8	0.007292	0.474908	distance	2	6	ball_tree
9	10	0.006536	0.474625	uniform	1	6	brute
10	11	0.006533	0.474623	uniform	1	6	ball_tree
11	12	0.006532	0.474622	uniform	1	6	kd_tree
12	13	0.006542	0.474191	distance	3	6	kd_tree
13	13	0.006542	0.474191	distance	3	6	ball_tree
14	13	0.006542	0.474191	distance	3	6	brute
15	16	0.006728	0.472828	distance	1	6	brute
16	17	0.006725	0.472826	distance	1	6	ball_tree
17	18	0.006725	0.472826	distance	1	6	kd_tree
18	19	0.006681	0.465227	uniform	2	5	brute
19	19	0.006681	0.465227	uniform	2	5	kd_tree
20	19	0.006681	0.465227	uniform	2	5	ball_tree
21	22	0.006653	0.464693	uniform	3	5	brute
22	22	0.006653	0.464693	uniform	3	5	ball_tree
23	22	0.006653	0.464693	uniform	3	5	kd_tree
24	25	0.006594	0.462624	distance	2	5	brute

Tabela 16: Hiperparâmetros: teddy_data_knn_m_x_m

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	26	0.006594	0.462624	distance	2	5	kd_tree
26	26	0.006594	0.462624	distance	2	5	ball_tree
27	28	0.006261	0.462186	distance	3	5	kd_tree
28	28	0.006261	0.462186	distance	3	5	ball_tree
29	28	0.006261	0.462186	distance	3	5	brute
30	31	0.007514	0.461862	uniform	1	5	brute
31	32	0.007514	0.461861	uniform	1	5	ball_tree
32	32	0.007514	0.461861	uniform	1	5	kd_tree
33	34	0.007595	0.459628	distance	1	5	ball_tree
34	34	0.007595	0.459628	distance	1	5	kd_tree
35	36	0.007595	0.459628	distance	1	5	brute
36	37	0.007981	0.444870	uniform	2	4	brute
37	37	0.007981	0.444870	uniform	2	4	ball_tree
38	37	0.007981	0.444870	uniform	2	4	kd_tree
39	40	0.007743	0.444501	uniform	3	4	ball_tree
40	40	0.007743	0.444501	uniform	3	4	brute
41	40	0.007743	0.444501	uniform	3	4	kd_tree
42	43	0.007426	0.442007	distance	2	4	ball_tree
43	43	0.007426	0.442007	distance	2	4	kd_tree
44	45	0.007426	0.442007	distance	2	4	brute
45	46	0.005785	0.441716	uniform	1	4	brute
46	47	0.005785	0.441716	uniform	1	4	kd_tree
47	47	0.005785	0.441716	uniform	1	4	ball_tree
48	49	0.006968	0.441716	distance	3	4	brute
49	49	0.006968	0.441716	distance	3	4	kd_tree

Tabela 17: Hiperparâmetros: teddy_data_mlp_m_x_m

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.010878	0.340889	lbfgs	500	10	logistic
1	2	0.027617	0.336509	lbfgs	500	10	relu
2	3	0.012953	0.326599	lbfgs	250	10	logistic
3	4	0.017794	0.313884	adam	100	5	tanh
4	4	0.017794	0.313884	adam	250	5	tanh
5	4	0.017794	0.313884	adam	500	5	tanh
6	7	0.011933	0.306253	adam	500	(5, 5)	tanh
7	7	0.011933	0.306253	adam	250	(5, 5)	tanh
8	7	0.011933	0.306253	adam	100	(5, 5)	tanh
9	10	0.143232	0.285789	adam	500	(5, 5)	relu
10	10	0.143232	0.285789	adam	100	(5, 5)	relu
11	10	0.143232	0.285789	adam	250	(5, 5)	relu
12	13	0.021731	0.282120	adam	500	10	logistic
13	13	0.021731	0.282120	adam	100	10	logistic
14	13	0.021731	0.282120	adam	250	10	logistic
15	16	0.033850	0.271740	adam	250	10	tanh
16	16	0.033850	0.271740	adam	100	10	tanh
17	16	0.033850	0.271740	adam	500	10	tanh
18	19	0.125941	0.235762	lbfgs	500	(5, 5)	identity
19	20	0.060447	0.218837	lbfgs	500	10	tanh
20	21	0.039025	0.207751	lbfgs	500	5	relu
21	22	0.058713	0.204507	lbfgs	250	10	tanh
22	23	0.016513	0.204052	lbfgs	100	10	logistic
23	24	0.041107	0.141560	lbfgs	500	5	identity
24	25	0.016444	0.109896	adam	250	(5, 5)	logistic

Tabela 18: Hiperparâmetros: teddy_data_mlp_m_x_m

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	25	0.016444	0.109896	adam	100	(5, 5)	logistic
26	25	0.016444	0.109896	adam	500	(5, 5)	logistic
27	28	0.001215	0.037080	sgd	500	10	logistic
28	28	0.001215	0.037080	sgd	250	10	logistic
29	28	0.001215	0.037080	sgd	100	10	logistic
30	31	0.000444	0.002135	sgd	100	5	logistic
31	31	0.000444	0.002135	sgd	250	5	logistic
32	31	0.000444	0.002135	sgd	500	5	logistic
33	34	0.000109	0.001810	sgd	100	(5, 5)	logistic
34	34	0.000109	0.001810	sgd	500	(5, 5)	logistic
35	34	0.000109	0.001810	sgd	250	(5, 5)	logistic
36	37	0.000110	-0.000054	lbfgs	100	5	logistic
37	37	0.000110	-0.000054	lbfgs	500	5	logistic
38	37	0.000110	-0.000054	lbfgs	250	5	logistic
39	40	0.000107	-0.000128	lbfgs	500	(5, 5)	logistic
40	40	0.000107	-0.000128	lbfgs	100	(5, 5)	logistic
41	40	0.000107	-0.000128	lbfgs	250	(5, 5)	logistic
42	43	0.000091	-0.000130	sgd	500	(5, 5)	relu
43	43	0.000091	-0.000130	sgd	250	(5, 5)	relu
44	43	0.000091	-0.000130	sgd	100	(5, 5)	relu
45	46	0.000099	-0.000131	sgd	500	10	relu
46	46	0.000099	-0.000131	sgd	250	10	relu
47	46	0.000099	-0.000131	sgd	100	10	relu
48	49	0.000106	-0.000133	lbfgs	500	(5, 5)	relu
49	49	0.000106	-0.000133	lbfgs	250	(5, 5)	relu

Tabela 19: Hiperparâmetros: teddy_data_mlp_m_x_m

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	49	0.000106	-0.000133	lbfgs	100	(5, 5)	relu
51	52	0.000103	-0.000134	lbfgs	100	5	tanh
52	52	0.000103	-0.000134	lbfgs	250	5	tanh
53	52	0.000103	-0.000134	lbfgs	500	5	tanh
54	55	0.000102	-0.000136	lbfgs	100	(5, 5)	tanh
55	55	0.000102	-0.000136	lbfgs	500	(5, 5)	tanh
56	55	0.000102	-0.000136	lbfgs	250	(5, 5)	tanh
57	58	0.000147	-0.000145	sgd	100	5	relu
58	58	0.000147	-0.000145	sgd	500	5	relu
59	58	0.000147	-0.000145	sgd	250	5	relu
60	61	0.000260	-0.000301	sgd	100	(5, 5)	tanh
61	61	0.000260	-0.000301	sgd	500	(5, 5)	tanh
62	61	0.000260	-0.000301	sgd	250	(5, 5)	tanh
63	64	0.000428	-0.000342	sgd	250	5	tanh
64	64	0.000428	-0.000342	sgd	100	5	tanh
65	64	0.000428	-0.000342	sgd	500	5	tanh
66	67	0.000239	-0.000795	sgd	500	10	tanh
67	67	0.000239	-0.000795	sgd	250	10	tanh
68	67	0.000239	-0.000795	sgd	100	10	tanh
69	70	0.003132	-0.029141	adam	100	5	logistic
70	70	0.003132	-0.029141	adam	250	5	logistic
71	70	0.003132	-0.029141	adam	500	5	logistic
72	73	0.227304	-0.063875	lbfgs	500	10	identity
73	74	0.108859	-0.087308	lbfgs	250	5	relu
74	75	0.387095	-0.294795	lbfgs	100	10	tanh

Tabela 20: Hiperparâmetros: teddy_data_mlp_m_x_m

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	76	0.413499	-0.313549	lbfgs	250	10	relu
76	77	0.217724	-0.466848	lbfgs	250	5	identity
77	78	0.273017	-0.607727	lbfgs	250	10	identity
78	79	0.519768	-1.003473	lbfgs	250	(5, 5)	identity
79	80	0.432892	-1.263778	lbfgs	100	10	relu
80	81	0.378317	-1.841965	lbfgs	100	10	identity
81	82	0.251876	-1.882672	adam	100	10	identity
82	82	0.251876	-1.882672	adam	250	10	identity
83	82	0.251876	-1.882672	adam	500	10	identity
84	85	0.329268	-1.970326	adam	250	(5, 5)	identity
85	85	0.329268	-1.970326	adam	100	(5, 5)	identity
86	85	0.329268	-1.970326	adam	500	(5, 5)	identity
87	88	0.086374	-2.444868	lbfgs	100	5	identity
88	89	0.280268	-2.508300	lbfgs	100	5	relu
89	90	0.682488	-2.737782	lbfgs	100	(5, 5)	identity
90	91	0.568302	-19.038210	adam	250	5	identity
91	91	0.568302	-19.038210	adam	100	5	identity
92	91	0.568302	-19.038210	adam	500	5	identity
93	94	0.837306	-19.510248	adam	500	5	relu
94	94	0.837306	-19.510248	adam	100	5	relu
95	94	0.837306	-19.510248	adam	250	5	relu
96	97	0.700961	-26.752138	adam	100	10	relu
97	97	0.700961	-26.752138	adam	250	10	relu
98	97	0.700961	-26.752138	adam	500	10	relu
99	100	NaN	NaN	sgd	100	(5, 5)	identity

Tabela 21: Hiperparâmetros: teddy_data_rf_m_x_m

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.006645	0.513892	absolute_error
2	0.007416	0.512801	poisson
3	0.006331	0.511177	squared_error

Tabela 22: Hiperparâmetros: teddy_data_xgb_m_x_m

rank_test_score	std_test_score	mean_test_score	param_estimator__objective	param_estimator__max_depth
1	0.006789	0.527565	reg:squarederror	5
2	0.008538	0.501074	reg:squarederror	10
3	0.004108	0.478807	reg:squarederror	1

Tabela 23: Hiperparâmetros: teddy_data_dt_m_x_1_err_u

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.002889	0.722885	best	5	poisson
2	0.001849	0.721885	best	5	squared_error
2	0.001849	0.721885	best	5	friedman_mse
4	0.003819	0.721301	random	10	squared_error
5	0.003771	0.721274	random	10	friedman_mse
6	0.002361	0.720345	random	10	poisson
7	0.004837	0.714082	random	10	absolute_error
8	0.003756	0.713598	best	5	absolute_error
9	0.007418	0.702682	best	10	poisson
10	0.006172	0.702115	best	10	absolute_error
11	0.004694	0.701648	best	10	friedman_mse
12	0.004639	0.701605	best	10	squared_error
13	0.004450	0.691824	random	5	poisson
14	0.009727	0.681972	random	5	friedman_mse
14	0.009727	0.681972	random	5	squared_error
16	0.010936	0.670307	random	5	absolute_error
17	0.003627	0.667209	random	15	absolute_error
18	0.012469	0.663793	random	15	poisson
19	0.008413	0.659924	random	15	friedman_mse
20	0.010101	0.659414	random	15	squared_error
21	0.006729	0.631254	best	15	absolute_error
22	0.011029	0.607237	best	15	friedman_mse
23	0.010640	0.606654	best	15	squared_error
24	0.007503	0.604176	best	15	poisson

Tabela 24: Hiperparâmetros: teddy_data_dt_m_x_1_err_g

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.006548	0.731480	best	5	poisson
2	0.005645	0.729337	best	5	squared_error
2	0.005645	0.729337	best	5	friedman_mse
4	0.008824	0.728812	random	10	poisson
5	0.009284	0.726937	random	10	friedman_mse
6	0.009221	0.726832	random	10	squared_error
7	0.005934	0.725197	random	10	absolute_error
8	0.007047	0.724146	best	5	absolute_error
9	0.007889	0.721293	best	10	absolute_error
10	0.003440	0.716928	best	10	poisson
11	0.006071	0.712569	best	10	squared_error
12	0.006171	0.712488	best	10	friedman_mse
13	0.006292	0.708299	random	5	squared_error
13	0.006292	0.708299	random	5	friedman_mse
15	0.013438	0.690961	random	5	poisson
16	0.010619	0.684812	random	15	absolute_error
17	0.010259	0.677781	random	15	friedman_mse
18	0.004192	0.677369	random	5	absolute_error
19	0.011806	0.675654	random	15	squared_error
20	0.008301	0.674697	random	15	poisson
21	0.009737	0.654014	best	15	absolute_error
22	0.005135	0.636830	best	15	poisson
23	0.010180	0.632726	best	15	squared_error
24	0.009498	0.632151	best	15	friedman_mse

Tabela 25: Hiperparâmetros: teddy_data_dt_m_x_1_err_r

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.012230	0.485338	random	10	friedman_mse
2	0.013701	0.483697	random	10	poisson
3	0.011631	0.483232	random	10	squared_error
4	0.008163	0.478137	best	5	poisson
5	0.007530	0.477697	best	5	squared_error
5	0.007530	0.477697	best	5	friedman_mse
7	0.006257	0.470847	random	10	absolute_error
8	0.010577	0.466010	best	10	poisson
9	0.014575	0.465202	best	10	absolute_error
10	0.006810	0.462859	best	5	absolute_error
11	0.013180	0.457781	best	10	squared_error
12	0.014077	0.457246	best	10	friedman_mse
13	0.006308	0.447461	random	5	friedman_mse
13	0.006308	0.447461	random	5	squared_error
15	0.006091	0.447014	random	5	poisson
16	0.007478	0.425976	random	5	absolute_error
17	0.035145	0.387789	random	15	absolute_error
18	0.019498	0.377798	random	15	poisson
19	0.026128	0.361003	random	15	friedman_mse
20	0.025644	0.360454	random	15	squared_error
21	0.018403	0.323661	best	15	absolute_error
22	0.011731	0.303536	best	15	squared_error
23	0.010008	0.302133	best	15	friedman_mse
24	0.023996	0.291345	best	15	poisson

Tabela 26: Hiperparâmetros: teddy_data_dt_m_x_1_err_i

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.014842	0.270454	random	10	squared_error
2	0.014777	0.270370	random	10	friedman_mse
3	0.020223	0.264710	random	10	poisson
4	0.009955	0.260923	best	5	poisson
5	0.006767	0.258006	best	5	squared_error
5	0.006767	0.258006	best	5	friedman_mse
7	0.016539	0.249841	random	10	absolute_error
8	0.009531	0.242802	random	5	squared_error
8	0.009531	0.242802	random	5	friedman_mse
10	0.009055	0.242059	random	5	poisson
11	0.012313	0.240145	best	10	squared_error
12	0.011405	0.238822	best	10	friedman_mse
13	0.010396	0.238688	best	5	absolute_error
14	0.009216	0.237635	best	10	absolute_error
15	0.009977	0.232992	best	10	poisson
16	0.010683	0.215324	random	5	absolute_error
17	0.025853	0.133091	random	15	absolute_error
18	0.037687	0.126841	random	15	poisson
19	0.016035	0.126780	random	15	friedman_mse
20	0.018093	0.125173	random	15	squared_error
21	0.012736	0.061317	best	15	absolute_error
22	0.025590	0.037542	best	15	squared_error
23	0.025652	0.036036	best	15	friedman_mse
24	0.024805	0.018865	best	15	poisson

Tabela 27: Hiperparâmetros: teddy_data_dt_m_x_1_err_z

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.008521	0.221413	random	10	friedman_mse
2	0.008601	0.221207	random	10	squared_error
3	0.009084	0.212610	random	10	poisson
4	0.004155	0.202300	best	5	poisson
5	0.004321	0.200523	best	5	squared_error
5	0.004321	0.200523	best	5	friedman_mse
7	0.005779	0.197448	random	10	absolute_error
8	0.005609	0.190887	random	5	poisson
9	0.005751	0.190613	random	5	squared_error
9	0.005751	0.190613	random	5	friedman_mse
11	0.006077	0.183595	best	5	absolute_error
12	0.010774	0.180862	best	10	poisson
13	0.008361	0.179118	best	10	friedman_mse
14	0.008449	0.178839	best	10	squared_error
15	0.005743	0.167523	random	5	absolute_error
16	0.023593	0.167146	best	10	absolute_error
17	0.008128	0.088262	random	15	absolute_error
18	0.028137	0.068582	random	15	squared_error
19	0.027345	0.068178	random	15	friedman_mse
20	0.011959	0.067484	random	15	poisson
21	0.021619	0.032754	best	15	absolute_error
22	0.016710	0.022082	best	15	friedman_mse
23	0.018691	0.021372	best	15	squared_error
24	0.022010	0.009102	best	15	poisson

Tabela 28: Hiperparâmetros: teddy_data_knn_m_x_1_err_u

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.000997	0.716704	uniform	3	6	brute
1	1	0.000997	0.716704	uniform	3	6	ball_tree
2	1	0.000997	0.716704	uniform	3	6	kd_tree
3	4	0.001934	0.716699	uniform	2	6	ball_tree
4	4	0.001934	0.716699	uniform	2	6	kd_tree
5	4	0.001934	0.716699	uniform	2	6	brute
6	7	0.002035	0.715613	uniform	1	6	brute
7	8	0.002035	0.715613	uniform	1	6	kd_tree
8	9	0.002035	0.715613	uniform	1	6	ball_tree
9	10	0.001915	0.715256	distance	3	6	kd_tree
10	10	0.001915	0.715256	distance	3	6	ball_tree
11	10	0.001915	0.715256	distance	3	6	brute
12	13	0.002705	0.715253	distance	2	6	kd_tree
13	13	0.002705	0.715253	distance	2	6	ball_tree
14	15	0.002705	0.715253	distance	2	6	brute
15	16	0.002887	0.714263	distance	1	6	brute
16	17	0.002887	0.714262	distance	1	6	kd_tree
17	18	0.002887	0.714262	distance	1	6	ball_tree
18	19	0.002275	0.709989	uniform	2	5	brute
19	19	0.002275	0.709989	uniform	2	5	kd_tree
20	19	0.002275	0.709989	uniform	2	5	ball_tree
21	22	0.001071	0.709695	uniform	3	5	ball_tree
22	22	0.001071	0.709695	uniform	3	5	brute
23	22	0.001071	0.709695	uniform	3	5	kd_tree
24	25	0.003200	0.708155	distance	2	5	ball_tree

Tabela 29: Hiperparâmetros: teddy_data_knn_m_x_1_err_u

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	25	0.003200	0.708155	distance	2	5	kd_tree
26	27	0.003200	0.708155	distance	2	5	brute
27	28	0.002033	0.707852	distance	3	5	ball_tree
28	28	0.002033	0.707852	distance	3	5	brute
29	28	0.002033	0.707852	distance	3	5	kd_tree
30	31	0.002081	0.707799	uniform	1	5	kd_tree
31	31	0.002081	0.707799	uniform	1	5	ball_tree
32	33	0.002081	0.707799	uniform	1	5	brute
33	34	0.003058	0.706349	distance	1	5	kd_tree
34	34	0.003058	0.706349	distance	1	5	ball_tree
35	36	0.003058	0.706349	distance	1	5	brute
36	37	0.002116	0.698808	uniform	3	4	brute
37	37	0.002116	0.698808	uniform	3	4	kd_tree
38	37	0.002116	0.698808	uniform	3	4	ball_tree
39	40	0.003311	0.697942	uniform	2	4	kd_tree
40	40	0.003311	0.697942	uniform	2	4	ball_tree
41	40	0.003311	0.697942	uniform	2	4	brute
42	43	0.003091	0.696662	distance	3	4	kd_tree
43	43	0.003091	0.696662	distance	3	4	brute
44	43	0.003091	0.696662	distance	3	4	ball_tree
45	46	0.003010	0.696411	uniform	1	4	ball_tree
46	46	0.003010	0.696411	uniform	1	4	kd_tree
47	48	0.003010	0.696411	uniform	1	4	brute
48	49	0.004195	0.695993	distance	2	4	ball_tree
49	49	0.004195	0.695993	distance	2	4	kd_tree

Tabela 30: Hiperparâmetros: teddy_data_knn_m_x_1_err_g

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.004899	0.729422	uniform	2	6	kd_tree
1	1	0.004899	0.729422	uniform	2	6	brute
2	1	0.004899	0.729422	uniform	2	6	ball_tree
3	4	0.003884	0.728856	uniform	3	6	ball_tree
4	4	0.003884	0.728856	uniform	3	6	kd_tree
5	4	0.003884	0.728856	uniform	3	6	brute
6	7	0.003680	0.728705	uniform	1	6	brute
7	8	0.003680	0.728705	uniform	1	6	kd_tree
8	9	0.003680	0.728705	uniform	1	6	ball_tree
9	10	0.004552	0.728484	distance	2	6	kd_tree
10	10	0.004552	0.728484	distance	2	6	ball_tree
11	12	0.004552	0.728484	distance	2	6	brute
12	13	0.003613	0.728016	distance	3	6	kd_tree
13	13	0.003613	0.728016	distance	3	6	ball_tree
14	13	0.003613	0.728016	distance	3	6	brute
15	16	0.003960	0.727746	distance	1	6	brute
16	17	0.003960	0.727745	distance	1	6	kd_tree
17	18	0.003960	0.727745	distance	1	6	ball_tree
18	19	0.004447	0.723088	uniform	2	5	brute
19	19	0.004447	0.723088	uniform	2	5	kd_tree
20	19	0.004447	0.723088	uniform	2	5	ball_tree
21	22	0.003851	0.723053	uniform	3	5	brute
22	22	0.003851	0.723053	uniform	3	5	kd_tree
23	22	0.003851	0.723053	uniform	3	5	ball_tree
24	25	0.004232	0.722107	uniform	1	5	kd_tree

Tabela 31: Hiperparâmetros: teddy_data_knn_m_x_1_err_g

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	25	0.004232	0.722107	uniform	1	5	ball_tree
26	27	0.004232	0.722107	uniform	1	5	brute
27	28	0.004210	0.721745	distance	2	5	kd_tree
28	28	0.004210	0.721745	distance	2	5	ball_tree
29	30	0.004210	0.721745	distance	2	5	brute
30	31	0.003435	0.721711	distance	3	5	kd_tree
31	31	0.003435	0.721711	distance	3	5	brute
32	31	0.003435	0.721711	distance	3	5	ball_tree
33	34	0.004414	0.720878	distance	1	5	kd_tree
34	34	0.004414	0.720878	distance	1	5	ball_tree
35	36	0.004414	0.720878	distance	1	5	brute
36	37	0.004122	0.712232	uniform	2	4	kd_tree
37	37	0.004122	0.712232	uniform	2	4	ball_tree
38	37	0.004122	0.712232	uniform	2	4	brute
39	40	0.004332	0.712105	uniform	1	4	ball_tree
40	40	0.004332	0.712105	uniform	1	4	kd_tree
41	42	0.004332	0.712105	uniform	1	4	brute
42	43	0.003165	0.712043	uniform	3	4	brute
43	43	0.003165	0.712043	uniform	3	4	kd_tree
44	43	0.003165	0.712043	uniform	3	4	ball_tree
45	46	0.003994	0.710784	distance	2	4	ball_tree
46	46	0.003994	0.710784	distance	2	4	kd_tree
47	48	0.003994	0.710784	distance	2	4	brute
48	49	0.002741	0.710608	distance	3	4	brute
49	49	0.002741	0.710608	distance	3	4	ball_tree

Tabela 32: Hiperparâmetros: teddy_data_knn_m_x_1_err_r

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.010829	0.484079	uniform	2	6	kd_tree
1	1	0.010829	0.484079	uniform	2	6	brute
2	1	0.010829	0.484079	uniform	2	6	ball_tree
3	4	0.010086	0.483150	uniform	3	6	ball_tree
4	4	0.010086	0.483150	uniform	3	6	kd_tree
5	4	0.010086	0.483150	uniform	3	6	brute
6	7	0.010449	0.482874	distance	2	6	brute
7	8	0.010449	0.482874	distance	2	6	kd_tree
8	8	0.010449	0.482874	distance	2	6	ball_tree
9	10	0.009701	0.482097	distance	3	6	kd_tree
10	10	0.009701	0.482097	distance	3	6	ball_tree
11	10	0.009701	0.482097	distance	3	6	brute
12	13	0.010069	0.481968	uniform	1	6	brute
13	14	0.010064	0.481965	uniform	1	6	ball_tree
14	15	0.010064	0.481965	uniform	1	6	kd_tree
15	16	0.009926	0.480732	distance	1	6	brute
16	17	0.009923	0.480730	distance	1	6	ball_tree
17	18	0.009923	0.480730	distance	1	6	kd_tree
18	19	0.009929	0.473641	uniform	2	5	brute
19	19	0.009929	0.473641	uniform	2	5	kd_tree
20	19	0.009929	0.473641	uniform	2	5	ball_tree
21	22	0.010346	0.472654	uniform	3	5	brute
22	22	0.010346	0.472654	uniform	3	5	ball_tree
23	22	0.010346	0.472654	uniform	3	5	kd_tree
24	25	0.009618	0.471591	distance	2	5	brute

Tabela 33: Hiperparâmetros: teddy_data_knn_m_x_1_err_r

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	26	0.009618	0.471591	distance	2	5	kd_tree
26	26	0.009618	0.471591	distance	2	5	ball_tree
27	28	0.009541	0.470724	distance	3	5	kd_tree
28	28	0.009541	0.470724	distance	3	5	ball_tree
29	28	0.009541	0.470724	distance	3	5	brute
30	31	0.011008	0.469753	uniform	1	5	ball_tree
31	31	0.011008	0.469753	uniform	1	5	kd_tree
32	33	0.011009	0.469753	uniform	1	5	brute
33	34	0.010876	0.468067	distance	1	5	ball_tree
34	34	0.010876	0.468067	distance	1	5	kd_tree
35	36	0.010876	0.468067	distance	1	5	brute
36	37	0.011582	0.453800	uniform	2	4	brute
37	37	0.011582	0.453800	uniform	2	4	ball_tree
38	37	0.011582	0.453800	uniform	2	4	kd_tree
39	40	0.010828	0.452423	uniform	3	4	ball_tree
40	40	0.010828	0.452423	uniform	3	4	brute
41	40	0.010828	0.452423	uniform	3	4	kd_tree
42	43	0.010566	0.451621	distance	2	4	brute
43	44	0.010566	0.451621	distance	2	4	ball_tree
44	44	0.010566	0.451621	distance	2	4	kd_tree
45	46	0.009094	0.450475	uniform	1	4	brute
46	47	0.009094	0.450475	uniform	1	4	kd_tree
47	47	0.009094	0.450475	uniform	1	4	ball_tree
48	49	0.009714	0.450422	distance	3	4	brute
49	49	0.009714	0.450422	distance	3	4	kd_tree

Tabela 34: Hiperparâmetros: teddy_data_knn_m_x_1_err_i

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.013414	0.250715	uniform	2	6	kd_tree
1	1	0.013414	0.250715	uniform	2	6	brute
2	1	0.013414	0.250715	uniform	2	6	ball_tree
3	4	0.013756	0.249496	uniform	3	6	ball_tree
4	4	0.013756	0.249496	uniform	3	6	kd_tree
5	4	0.013756	0.249496	uniform	3	6	brute
6	7	0.012759	0.248063	distance	2	6	brute
7	8	0.012759	0.248063	distance	2	6	kd_tree
8	8	0.012759	0.248063	distance	2	6	ball_tree
9	10	0.011859	0.247533	uniform	1	6	brute
10	11	0.011850	0.247527	uniform	1	6	ball_tree
11	12	0.011850	0.247527	uniform	1	6	kd_tree
12	13	0.012902	0.247076	distance	3	6	kd_tree
13	13	0.012902	0.247076	distance	3	6	ball_tree
14	13	0.012902	0.247076	distance	3	6	brute
15	16	0.011722	0.244879	distance	1	6	brute
16	17	0.011715	0.244874	distance	1	6	ball_tree
17	18	0.011715	0.244874	distance	1	6	kd_tree
18	19	0.011633	0.234736	uniform	2	5	brute
19	19	0.011633	0.234736	uniform	2	5	kd_tree
20	19	0.011633	0.234736	uniform	2	5	ball_tree
21	22	0.012969	0.234726	uniform	3	5	brute
22	22	0.012969	0.234726	uniform	3	5	ball_tree
23	22	0.012969	0.234726	uniform	3	5	kd_tree
24	25	0.011071	0.230860	distance	2	5	brute

Tabela 35: Hiperparâmetros: teddy_data_knn_m_x_1_err_i

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	26	0.011071	0.230860	distance	2	5	ball_tree
26	26	0.011071	0.230860	distance	2	5	kd_tree
27	28	0.011896	0.230831	distance	3	5	ball_tree
28	28	0.011896	0.230831	distance	3	5	kd_tree
29	28	0.011896	0.230831	distance	3	5	brute
30	31	0.012508	0.229454	uniform	1	5	brute
31	32	0.012509	0.229453	uniform	1	5	kd_tree
32	32	0.012509	0.229453	uniform	1	5	ball_tree
33	34	0.012304	0.226115	distance	1	5	brute
34	35	0.012304	0.226115	distance	1	5	kd_tree
35	35	0.012304	0.226115	distance	1	5	ball_tree
36	37	0.013378	0.206304	uniform	2	4	ball_tree
37	37	0.013378	0.206304	uniform	2	4	brute
38	37	0.013378	0.206304	uniform	2	4	kd_tree
39	40	0.014206	0.205099	uniform	3	4	brute
40	40	0.014206	0.205099	uniform	3	4	kd_tree
41	40	0.014206	0.205099	uniform	3	4	ball_tree
42	43	0.012204	0.202056	distance	2	4	brute
43	44	0.012204	0.202056	distance	2	4	ball_tree
44	44	0.012204	0.202056	distance	2	4	kd_tree
45	46	0.012523	0.201049	distance	3	4	brute
46	46	0.012523	0.201049	distance	3	4	kd_tree
47	46	0.012523	0.201049	distance	3	4	ball_tree
48	49	0.009189	0.199536	uniform	1	4	brute
49	50	0.009189	0.199536	uniform	1	4	kd_tree

Tabela 36: Hiperparâmetros: teddy_data_knn_m_x_1_err_z

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.009443	0.202610	uniform	2	6	kd_tree
1	1	0.009443	0.202610	uniform	2	6	brute
2	1	0.009443	0.202610	uniform	2	6	ball_tree
3	4	0.007956	0.200944	uniform	3	6	ball_tree
4	4	0.007956	0.200944	uniform	3	6	kd_tree
5	4	0.007956	0.200944	uniform	3	6	brute
6	7	0.009342	0.199865	distance	2	6	brute
7	8	0.009342	0.199865	distance	2	6	kd_tree
8	8	0.009342	0.199865	distance	2	6	ball_tree
9	10	0.008352	0.199304	uniform	1	6	brute
10	11	0.008351	0.199303	uniform	1	6	ball_tree
11	12	0.008348	0.199301	uniform	1	6	kd_tree
12	13	0.008279	0.198507	distance	3	6	kd_tree
13	13	0.008279	0.198507	distance	3	6	ball_tree
14	13	0.008279	0.198507	distance	3	6	brute
15	16	0.008936	0.196522	distance	1	6	brute
16	17	0.008935	0.196521	distance	1	6	ball_tree
17	18	0.008933	0.196519	distance	1	6	kd_tree
18	19	0.009074	0.184681	uniform	2	5	brute
19	19	0.009074	0.184681	uniform	2	5	kd_tree
20	19	0.009074	0.184681	uniform	2	5	ball_tree
21	22	0.008028	0.183336	uniform	3	5	brute
22	22	0.008028	0.183336	uniform	3	5	kd_tree
23	22	0.008028	0.183336	uniform	3	5	ball_tree
24	25	0.009221	0.180768	distance	2	5	brute

Tabela 37: Hiperparâmetros: teddy_data_knn_m_x_1_err_z

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	26	0.009221	0.180768	distance	2	5	ball_tree
26	26	0.009221	0.180768	distance	2	5	kd_tree
27	28	0.010786	0.180195	uniform	1	5	brute
28	29	0.010786	0.180195	uniform	1	5	ball_tree
29	29	0.010786	0.180195	uniform	1	5	kd_tree
30	31	0.008136	0.179810	distance	3	5	ball_tree
31	31	0.008136	0.179810	distance	3	5	kd_tree
32	31	0.008136	0.179810	distance	3	5	brute
33	34	0.010903	0.176731	distance	1	5	kd_tree
34	34	0.010903	0.176731	distance	1	5	ball_tree
35	36	0.010904	0.176731	distance	1	5	brute
36	37	0.011072	0.154134	uniform	3	4	ball_tree
37	37	0.011072	0.154134	uniform	3	4	kd_tree
38	37	0.011072	0.154134	uniform	3	4	brute
39	40	0.011592	0.154072	uniform	2	4	ball_tree
40	40	0.011592	0.154072	uniform	2	4	brute
41	40	0.011592	0.154072	uniform	2	4	kd_tree
42	43	0.007450	0.150055	uniform	1	4	brute
43	44	0.007452	0.150053	uniform	1	4	kd_tree
44	44	0.007452	0.150053	uniform	1	4	ball_tree
45	46	0.010400	0.149837	distance	3	4	ball_tree
46	46	0.010400	0.149837	distance	3	4	kd_tree
47	46	0.010400	0.149837	distance	3	4	brute
48	49	0.010841	0.149582	distance	2	4	brute
49	50	0.010841	0.149582	distance	2	4	ball_tree

Tabela 38: Hiperparâmetros: teddy_data_mlp_m_x_1_err_u

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.010845	0.718068	lbfgs	250	(5, 5)	tanh
1	1	0.010845	0.718068	lbfgs	500	(5, 5)	tanh
2	3	0.014828	0.707437	lbfgs	500	5	relu
3	4	0.003666	0.705059	lbfgs	500	10	identity
4	5	0.003718	0.704814	lbfgs	250	10	relu
5	6	0.003720	0.704810	lbfgs	500	10	relu
6	7	0.003504	0.704691	lbfgs	250	10	identity
7	8	0.003455	0.704386	lbfgs	500	(5, 5)	identity
8	9	0.004010	0.704373	lbfgs	250	5	identity
9	9	0.004010	0.704373	lbfgs	500	5	identity
10	11	0.008822	0.704305	lbfgs	250	5	relu
11	12	0.002553	0.701266	lbfgs	250	(5, 5)	identity
12	13	0.004347	0.701090	lbfgs	500	10	tanh
13	14	0.005578	0.700054	lbfgs	500	10	logistic
14	15	0.004923	0.699718	lbfgs	250	10	tanh
15	16	0.010977	0.699506	lbfgs	100	5	identity
16	17	0.003477	0.698682	lbfgs	250	10	logistic
17	18	0.015718	0.686031	lbfgs	100	5	relu
18	19	0.003314	0.685491	adam	250	10	tanh
19	19	0.003314	0.685491	adam	100	10	tanh
20	19	0.003314	0.685491	adam	500	10	tanh
21	22	0.008288	0.679106	lbfgs	100	(5, 5)	tanh
22	23	0.011595	0.678236	lbfgs	100	10	tanh
23	24	0.011481	0.675311	adam	500	5	relu
24	24	0.011481	0.675311	adam	250	5	relu

Tabela 39: Hiperparâmetros: teddy_data_mlp_m_x_1_err_u

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	24	0.011481	0.675311	adam	100	5	relu
26	27	0.027060	0.671493	lbfgs	100	10	logistic
27	28	0.004844	0.667420	adam	500	5	logistic
28	28	0.004844	0.667420	adam	100	5	logistic
29	28	0.004844	0.667420	adam	250	5	logistic
30	31	0.022623	0.666466	lbfgs	100	(5, 5)	identity
31	32	0.008900	0.659771	adam	100	10	logistic
32	32	0.008900	0.659771	adam	250	10	logistic
33	32	0.008900	0.659771	adam	500	10	logistic
34	35	0.019331	0.655641	adam	250	(5, 5)	tanh
35	35	0.019331	0.655641	adam	100	(5, 5)	tanh
36	35	0.019331	0.655641	adam	500	(5, 5)	tanh
37	38	0.012917	0.654226	adam	500	5	tanh
38	38	0.012917	0.654226	adam	250	5	tanh
39	38	0.012917	0.654226	adam	100	5	tanh
40	41	0.018571	0.641894	adam	500	(5, 5)	identity
41	41	0.018571	0.641894	adam	100	(5, 5)	identity
42	41	0.018571	0.641894	adam	250	(5, 5)	identity
43	44	0.017429	0.633109	adam	250	(5, 5)	logistic
44	44	0.017429	0.633109	adam	100	(5, 5)	logistic
45	44	0.017429	0.633109	adam	500	(5, 5)	logistic
46	47	0.041761	0.622608	adam	500	10	identity
47	47	0.041761	0.622608	adam	250	10	identity
48	49	0.041379	0.622132	adam	100	10	identity
49	50	0.028838	0.613123	adam	500	10	relu

Tabela 40: Hiperparâmetros: teddy_data_mlp_m_x_1_err_u

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	50	0.028838	0.613123	adam	250	10	relu
51	52	0.050723	0.596607	lbfgs	100	10	relu
52	53	0.019719	0.589669	adam	100	10	relu
53	54	0.101141	0.565183	lbfgs	100	10	identity
54	55	0.215525	0.419747	adam	500	5	identity
55	55	0.215525	0.419747	adam	100	5	identity
56	55	0.215525	0.419747	adam	250	5	identity
57	58	0.001064	0.036699	sgd	500	(5, 5)	tanh
58	58	0.001064	0.036699	sgd	250	(5, 5)	tanh
59	58	0.001064	0.036699	sgd	100	(5, 5)	tanh
60	61	0.000618	0.034804	sgd	500	5	logistic
61	61	0.000618	0.034804	sgd	250	5	logistic
62	61	0.000618	0.034804	sgd	100	5	logistic
63	64	0.000564	0.022847	sgd	250	10	logistic
64	64	0.000564	0.022847	sgd	500	10	logistic
65	64	0.000564	0.022847	sgd	100	10	logistic
66	67	0.000097	0.000220	sgd	100	(5, 5)	logistic
67	67	0.000097	0.000220	sgd	250	(5, 5)	logistic
68	67	0.000097	0.000220	sgd	500	(5, 5)	logistic
69	70	0.000072	-0.000070	lbfgs	100	5	logistic
70	70	0.000072	-0.000070	lbfgs	250	5	logistic
71	70	0.000072	-0.000070	lbfgs	500	5	logistic
72	73	0.000100	-0.000079	adam	500	(5, 5)	relu
73	73	0.000100	-0.000079	adam	250	(5, 5)	relu
74	73	0.000100	-0.000079	adam	100	(5, 5)	relu

Tabela 41: Hiperparâmetros: teddy_data_mlp_m_x_1_err_u

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	76	0.000072	-0.000080	lbfgs	250	5	tanh
76	76	0.000072	-0.000080	lbfgs	500	5	tanh
77	76	0.000072	-0.000080	lbfgs	100	5	tanh
78	79	0.000072	-0.000080	lbfgs	100	(5, 5)	relu
79	79	0.000072	-0.000080	lbfgs	500	(5, 5)	relu
80	79	0.000072	-0.000080	lbfgs	250	(5, 5)	relu
81	82	0.000072	-0.000080	lbfgs	100	(5, 5)	logistic
82	82	0.000072	-0.000080	lbfgs	500	(5, 5)	logistic
83	82	0.000072	-0.000080	lbfgs	250	(5, 5)	logistic
84	85	0.000058	-0.000083	sgd	250	5	relu
85	85	0.000058	-0.000083	sgd	500	5	relu
86	85	0.000058	-0.000083	sgd	100	5	relu
87	88	0.000111	-0.000086	sgd	250	(5, 5)	relu
88	88	0.000111	-0.000086	sgd	500	(5, 5)	relu
89	88	0.000111	-0.000086	sgd	100	(5, 5)	relu
90	91	0.000510	-0.000112	sgd	100	10	tanh
91	91	0.000510	-0.000112	sgd	500	10	tanh
92	91	0.000510	-0.000112	sgd	250	10	tanh
93	94	0.000167	-0.000129	sgd	100	10	relu
94	94	0.000167	-0.000129	sgd	250	10	relu
95	94	0.000167	-0.000129	sgd	500	10	relu
96	97	0.000049	-0.000134	sgd	500	5	tanh
97	97	0.000049	-0.000134	sgd	250	5	tanh
98	97	0.000049	-0.000134	sgd	100	5	tanh
99	100	NaN	NaN	sgd	500	(5, 5)	identity

Tabela 42: Hiperparâmetros: teddy_data_mlp_m_x_1_err_g

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.011574	0.685055	lbfgs	500	10	relu
1	1	0.011574	0.685055	lbfgs	250	10	relu
2	3	0.036973	0.673866	lbfgs	500	5	identity
3	4	0.035312	0.669798	lbfgs	250	5	identity
4	5	0.008288	0.668335	lbfgs	250	5	relu
5	5	0.008288	0.668335	lbfgs	500	5	relu
6	5	0.008288	0.668335	lbfgs	100	5	relu
7	8	0.005689	0.656815	lbfgs	500	(5, 5)	identity
8	8	0.005689	0.656815	lbfgs	100	(5, 5)	identity
9	8	0.005689	0.656815	lbfgs	250	(5, 5)	identity
10	11	0.037336	0.653514	lbfgs	500	5	logistic
11	11	0.037336	0.653514	lbfgs	250	5	logistic
12	11	0.037336	0.653514	lbfgs	100	5	logistic
13	14	0.012202	0.650752	adam	250	5	logistic
14	14	0.012202	0.650752	adam	100	5	logistic
15	14	0.012202	0.650752	adam	500	5	logistic
16	17	0.003687	0.645663	adam	500	10	logistic
17	17	0.003687	0.645663	adam	100	10	logistic
18	17	0.003687	0.645663	adam	250	10	logistic
19	20	0.036387	0.643340	lbfgs	250	10	logistic
20	20	0.036387	0.643340	lbfgs	500	10	logistic
21	22	0.028737	0.634885	lbfgs	100	10	logistic
22	23	0.051032	0.633942	lbfgs	100	5	identity
23	24	0.006935	0.633478	adam	250	10	tanh
24	24	0.006935	0.633478	adam	500	10	tanh

Tabela 43: Hiperparâmetros: teddy_data_mlp_m_x_1_err_g

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	24	0.006935	0.633478	adam	100	10	tanh
26	27	0.024708	0.612994	adam	500	5	tanh
27	27	0.024708	0.612994	adam	250	5	tanh
28	27	0.024708	0.612994	adam	100	5	tanh
29	30	0.009545	0.610945	adam	100	(5, 5)	tanh
30	30	0.009545	0.610945	adam	250	(5, 5)	tanh
31	30	0.009545	0.610945	adam	500	(5, 5)	tanh
32	33	0.204113	0.551418	lbfgs	100	10	relu
33	34	0.205532	0.541271	lbfgs	500	10	identity
34	34	0.205532	0.541271	lbfgs	250	10	identity
35	36	0.045336	0.457520	adam	100	5	relu
36	36	0.045336	0.457520	adam	250	5	relu
37	36	0.045336	0.457520	adam	500	5	relu
38	39	0.254020	0.350975	lbfgs	100	10	identity
39	40	0.008466	0.262243	adam	250	(5, 5)	logistic
40	40	0.008466	0.262243	adam	100	(5, 5)	logistic
41	40	0.008466	0.262243	adam	500	(5, 5)	logistic
42	43	0.001680	0.099102	sgd	100	5	logistic
43	43	0.001680	0.099102	sgd	500	5	logistic
44	43	0.001680	0.099102	sgd	250	5	logistic
45	46	0.001266	0.086335	sgd	100	10	logistic
46	46	0.001266	0.086335	sgd	250	10	logistic
47	46	0.001266	0.086335	sgd	500	10	logistic
48	49	0.000214	0.004630	sgd	250	(5, 5)	logistic
49	49	0.000214	0.004630	sgd	500	(5, 5)	logistic

Tabela 44: Hiperparâmetros: teddy_data_mlp_m_x_1_err_g

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	49	0.000214	0.004630	sgd	100	(5, 5)	logistic
51	52	0.000078	-0.000126	lbfgs	100	(5, 5)	logistic
52	52	0.000078	-0.000126	lbfgs	250	(5, 5)	logistic
53	52	0.000078	-0.000126	lbfgs	500	(5, 5)	logistic
54	55	0.000078	-0.000127	lbfgs	100	(5, 5)	relu
55	55	0.000078	-0.000127	lbfgs	250	(5, 5)	relu
56	55	0.000078	-0.000127	lbfgs	500	(5, 5)	relu
57	58	0.000078	-0.000127	lbfgs	500	5	tanh
58	58	0.000078	-0.000127	lbfgs	100	5	tanh
59	58	0.000078	-0.000127	lbfgs	250	5	tanh
60	61	0.000141	-0.000129	sgd	250	(5, 5)	relu
61	61	0.000141	-0.000129	sgd	100	(5, 5)	relu
62	61	0.000141	-0.000129	sgd	500	(5, 5)	relu
63	64	0.000086	-0.000130	sgd	500	5	relu
64	64	0.000086	-0.000130	sgd	250	5	relu
65	64	0.000086	-0.000130	sgd	100	5	relu
66	67	0.000101	-0.000136	sgd	250	5	tanh
67	67	0.000101	-0.000136	sgd	100	5	tanh
68	67	0.000101	-0.000136	sgd	500	5	tanh
69	70	0.000145	-0.000164	sgd	500	10	relu
70	70	0.000145	-0.000164	sgd	250	10	relu
71	70	0.000145	-0.000164	sgd	100	10	relu
72	73	0.000140	-0.000259	adam	250	(5, 5)	relu
73	73	0.000140	-0.000259	adam	100	(5, 5)	relu
74	73	0.000140	-0.000259	adam	500	(5, 5)	relu

Tabela 45: Hiperparâmetros: teddy_data_mlp_m_x_1_err_g

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	76	0.000718	-0.001983	lbfgs	250	(5, 5)	tanh
76	76	0.000718	-0.001983	lbfgs	500	(5, 5)	tanh
77	76	0.000718	-0.001983	lbfgs	100	(5, 5)	tanh
78	79	0.000048	-0.005340	lbfgs	100	10	tanh
79	79	0.000048	-0.005340	lbfgs	250	10	tanh
80	79	0.000048	-0.005340	lbfgs	500	10	tanh
81	82	0.000613	-0.005661	sgd	100	10	tanh
82	82	0.000613	-0.005661	sgd	500	10	tanh
83	82	0.000613	-0.005661	sgd	250	10	tanh
84	85	0.000754	-0.011385	sgd	500	(5, 5)	tanh
85	85	0.000754	-0.011385	sgd	250	(5, 5)	tanh
86	85	0.000754	-0.011385	sgd	100	(5, 5)	tanh
87	88	0.268422	-0.573025	adam	500	10	identity
88	88	0.268422	-0.573025	adam	100	10	identity
89	88	0.268422	-0.573025	adam	250	10	identity
90	91	0.532339	-0.829089	adam	500	(5, 5)	identity
91	91	0.532339	-0.829089	adam	250	(5, 5)	identity
92	91	0.532339	-0.829089	adam	100	(5, 5)	identity
93	94	0.063663	-1.480020	adam	100	5	identity
94	94	0.063663	-1.480020	adam	250	5	identity
95	94	0.063663	-1.480020	adam	500	5	identity
96	97	12.137866	-15.695701	adam	250	10	relu
97	97	12.137866	-15.695701	adam	500	10	relu
98	97	12.137866	-15.695701	adam	100	10	relu
99	100	NaN	NaN	sgd	250	5	identity

Tabela 46: Hiperparâmetros: teddy_data_mlp_m_x_1_err_r

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.028229	0.397265	adam	250	5	logistic
1	1	0.028229	0.397265	adam	500	5	logistic
2	1	0.028229	0.397265	adam	100	5	logistic
3	4	0.022870	0.394901	adam	100	10	tanh
4	4	0.022870	0.394901	adam	250	10	tanh
5	4	0.022870	0.394901	adam	500	10	tanh
6	7	0.060833	0.383449	lbfgs	500	10	relu
7	7	0.060833	0.383449	lbfgs	250	10	relu
8	9	0.046390	0.382154	lbfgs	100	5	identity
9	9	0.046390	0.382154	lbfgs	250	5	identity
10	9	0.046390	0.382154	lbfgs	500	5	identity
11	12	0.030352	0.381578	lbfgs	250	5	relu
12	12	0.030352	0.381578	lbfgs	500	5	relu
13	12	0.030352	0.381578	lbfgs	100	5	relu
14	15	0.011273	0.379095	adam	100	5	tanh
15	15	0.011273	0.379095	adam	500	5	tanh
16	15	0.011273	0.379095	adam	250	5	tanh
17	18	0.007197	0.374738	adam	100	10	logistic
18	18	0.007197	0.374738	adam	250	10	logistic
19	18	0.007197	0.374738	adam	500	10	logistic
20	21	0.193100	0.372827	lbfgs	500	10	identity
21	21	0.193100	0.372827	lbfgs	250	10	identity
22	23	0.029306	0.354160	lbfgs	100	10	relu
23	24	0.029246	0.350211	adam	100	(5, 5)	tanh
24	24	0.029246	0.350211	adam	250	(5, 5)	tanh

Tabela 47: Hiperparâmetros: teddy_data_mlp_m_x_1_err_r

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	24	0.029246	0.350211	adam	500	(5, 5)	tanh
26	27	0.076795	0.330357	lbfgs	500	10	logistic
27	27	0.076795	0.330357	lbfgs	250	10	logistic
28	27	0.076795	0.330357	lbfgs	100	10	logistic
29	30	0.007351	0.230779	adam	100	(5, 5)	logistic
30	30	0.007351	0.230779	adam	250	(5, 5)	logistic
31	30	0.007351	0.230779	adam	500	(5, 5)	logistic
32	33	0.126426	0.221179	lbfgs	250	5	logistic
33	33	0.126426	0.221179	lbfgs	500	5	logistic
34	33	0.126426	0.221179	lbfgs	100	5	logistic
35	36	0.238191	0.142425	lbfgs	100	(5, 5)	identity
36	36	0.238191	0.142425	lbfgs	250	(5, 5)	identity
37	36	0.238191	0.142425	lbfgs	500	(5, 5)	identity
38	39	0.001274	0.092913	sgd	100	10	logistic
39	39	0.001274	0.092913	sgd	250	10	logistic
40	39	0.001274	0.092913	sgd	500	10	logistic
41	42	0.000221	0.006890	sgd	500	(5, 5)	logistic
42	42	0.000221	0.006890	sgd	100	(5, 5)	logistic
43	42	0.000221	0.006890	sgd	250	(5, 5)	logistic
44	45	0.000140	-0.000125	sgd	100	(5, 5)	relu
45	45	0.000140	-0.000125	sgd	250	(5, 5)	relu
46	45	0.000140	-0.000125	sgd	500	(5, 5)	relu
47	48	0.000117	-0.000129	lbfgs	100	(5, 5)	logistic
48	48	0.000117	-0.000129	lbfgs	250	(5, 5)	logistic
49	48	0.000117	-0.000129	lbfgs	500	(5, 5)	logistic

Tabela 48: Hiperparâmetros: teddy_data_mlp_m_x_1_err_r

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	51	0.000118	-0.000131	lbfgs	250	(5, 5)	relu
51	51	0.000118	-0.000131	lbfgs	100	(5, 5)	relu
52	51	0.000118	-0.000131	lbfgs	500	(5, 5)	relu
53	54	0.000118	-0.000131	lbfgs	500	5	tanh
54	54	0.000118	-0.000131	lbfgs	100	5	tanh
55	54	0.000118	-0.000131	lbfgs	250	5	tanh
56	57	0.000142	-0.000143	sgd	500	5	relu
57	57	0.000142	-0.000143	sgd	100	5	relu
58	57	0.000142	-0.000143	sgd	250	5	relu
59	60	0.000164	-0.000151	sgd	250	10	relu
60	60	0.000164	-0.000151	sgd	100	10	relu
61	60	0.000164	-0.000151	sgd	500	10	relu
62	63	0.000191	-0.000198	sgd	250	5	tanh
63	63	0.000191	-0.000198	sgd	500	5	tanh
64	63	0.000191	-0.000198	sgd	100	5	tanh
65	66	0.000160	-0.000266	adam	100	(5, 5)	relu
66	66	0.000160	-0.000266	adam	250	(5, 5)	relu
67	66	0.000160	-0.000266	adam	500	(5, 5)	relu
68	69	0.002824	-0.004283	lbfgs	100	(5, 5)	tanh
69	69	0.002824	-0.004283	lbfgs	250	(5, 5)	tanh
70	69	0.002824	-0.004283	lbfgs	500	(5, 5)	tanh
71	72	0.004115	-0.004328	sgd	250	5	logistic
72	72	0.004115	-0.004328	sgd	500	5	logistic
73	72	0.004115	-0.004328	sgd	100	5	logistic
74	75	0.000083	-0.008886	lbfgs	500	10	tanh

Tabela 49: Hiperparâmetros: teddy_data_mlp_m_x_1_err_r

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	75	0.000083	-0.008886	lbfgs	250	10	tanh
76	75	0.000083	-0.008886	lbfgs	100	10	tanh
77	78	0.000575	-0.009681	sgd	250	10	tanh
78	78	0.000575	-0.009681	sgd	100	10	tanh
79	78	0.000575	-0.009681	sgd	500	10	tanh
80	81	0.000942	-0.041949	sgd	500	(5, 5)	tanh
81	81	0.000942	-0.041949	sgd	100	(5, 5)	tanh
82	81	0.000942	-0.041949	sgd	250	(5, 5)	tanh
83	84	0.265682	-0.223537	lbfgs	100	10	identity
84	85	0.634513	-3.996570	adam	500	10	identity
85	85	0.634513	-3.996570	adam	250	10	identity
86	85	0.634513	-3.996570	adam	100	10	identity
87	88	0.158744	-6.056449	adam	250	5	relu
88	88	0.158744	-6.056449	adam	100	5	relu
89	88	0.158744	-6.056449	adam	500	5	relu
90	91	0.267964	-6.936507	adam	100	5	identity
91	91	0.267964	-6.936507	adam	250	5	identity
92	91	0.267964	-6.936507	adam	500	5	identity
93	94	2.945166	-7.450547	adam	100	(5, 5)	identity
94	94	2.945166	-7.450547	adam	250	(5, 5)	identity
95	94	2.945166	-7.450547	adam	500	(5, 5)	identity
96	97	2.145225	-84.685314	adam	100	10	relu
97	97	2.145225	-84.685314	adam	250	10	relu
98	97	2.145225	-84.685314	adam	500	10	relu
99	100	NaN	NaN	sgd	250	5	identity

Tabela 50: Hiperparâmetros: teddy_data_mlp_m_x_1_err_i

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.014520	0.275456	lbfgs	500	10	identity
1	1	0.014520	0.275456	lbfgs	250	10	identity
2	3	0.019005	0.209328	adam	100	5	logistic
3	3	0.019005	0.209328	adam	500	5	logistic
4	3	0.019005	0.209328	adam	250	5	logistic
5	6	0.020413	0.202468	adam	100	10	tanh
6	6	0.020413	0.202468	adam	500	10	tanh
7	6	0.020413	0.202468	adam	250	10	tanh
8	9	0.007273	0.186843	adam	250	5	tanh
9	9	0.007273	0.186843	adam	100	5	tanh
10	9	0.007273	0.186843	adam	500	5	tanh
11	12	0.059348	0.180390	lbfgs	250	5	relu
12	12	0.059348	0.180390	lbfgs	500	5	relu
13	14	0.036331	0.176511	lbfgs	250	5	identity
14	14	0.036331	0.176511	lbfgs	100	5	identity
15	14	0.036331	0.176511	lbfgs	500	5	identity
16	17	0.052606	0.174422	lbfgs	100	5	relu
17	18	0.022889	0.172551	lbfgs	250	10	relu
18	18	0.022889	0.172551	lbfgs	500	10	relu
19	20	0.013411	0.167486	adam	500	10	logistic
20	20	0.013411	0.167486	adam	250	10	logistic
21	20	0.013411	0.167486	adam	100	10	logistic
22	23	0.030946	0.162360	adam	100	(5, 5)	tanh
23	23	0.030946	0.162360	adam	250	(5, 5)	tanh
24	23	0.030946	0.162360	adam	500	(5, 5)	tanh

Tabela 51: Hiperparâmetros: teddy_data_mlp_m_x_1_err_i

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	26	0.003495	0.133473	adam	250	(5, 5)	logistic
26	26	0.003495	0.133473	adam	100	(5, 5)	logistic
27	26	0.003495	0.133473	adam	500	(5, 5)	logistic
28	29	0.050263	0.123396	lbfgs	100	10	relu
29	30	0.100132	0.123318	lbfgs	500	(5, 5)	identity
30	30	0.100132	0.123318	lbfgs	250	(5, 5)	identity
31	32	0.035329	0.115309	lbfgs	100	10	logistic
32	32	0.035329	0.115309	lbfgs	250	10	logistic
33	32	0.035329	0.115309	lbfgs	500	10	logistic
34	35	0.086812	0.112456	lbfgs	100	(5, 5)	identity
35	36	0.396129	0.083779	lbfgs	100	10	identity
36	37	0.002723	0.064385	lbfgs	100	5	logistic
37	37	0.002723	0.064385	lbfgs	250	5	logistic
38	37	0.002723	0.064385	lbfgs	500	5	logistic
39	40	0.001755	0.058486	sgd	100	10	logistic
40	40	0.001755	0.058486	sgd	250	10	logistic
41	40	0.001755	0.058486	sgd	500	10	logistic
42	43	0.000324	0.004991	sgd	500	(5, 5)	logistic
43	43	0.000324	0.004991	sgd	100	(5, 5)	logistic
44	43	0.000324	0.004991	sgd	250	(5, 5)	logistic
45	46	0.000206	-0.000182	sgd	100	(5, 5)	relu
46	46	0.000206	-0.000182	sgd	500	(5, 5)	relu
47	46	0.000206	-0.000182	sgd	250	(5, 5)	relu
48	49	0.000213	-0.000188	lbfgs	100	(5, 5)	logistic
49	49	0.000213	-0.000188	lbfgs	250	(5, 5)	logistic

Tabela 52: Hiperparâmetros: teddy_data_mlp_m_x_1_err_i

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	49	0.000213	-0.000188	lbfgs	500	(5, 5)	logistic
51	52	0.000214	-0.000190	lbfgs	100	(5, 5)	relu
52	52	0.000214	-0.000190	lbfgs	250	(5, 5)	relu
53	52	0.000214	-0.000190	lbfgs	500	(5, 5)	relu
54	55	0.000214	-0.000190	lbfgs	500	5	tanh
55	55	0.000214	-0.000190	lbfgs	250	5	tanh
56	55	0.000214	-0.000190	lbfgs	100	5	tanh
57	58	0.000253	-0.000198	sgd	500	10	relu
58	58	0.000253	-0.000198	sgd	250	10	relu
59	58	0.000253	-0.000198	sgd	100	10	relu
60	61	0.000260	-0.000198	sgd	100	5	relu
61	61	0.000260	-0.000198	sgd	250	5	relu
62	61	0.000260	-0.000198	sgd	500	5	relu
63	64	0.000221	-0.000255	adam	250	(5, 5)	relu
64	64	0.000221	-0.000255	adam	500	(5, 5)	relu
65	64	0.000221	-0.000255	adam	100	(5, 5)	relu
66	67	0.000210	-0.000265	sgd	500	5	tanh
67	67	0.000210	-0.000265	sgd	100	5	tanh
68	67	0.000210	-0.000265	sgd	250	5	tanh
69	70	0.000284	-0.005223	lbfgs	250	10	tanh
70	70	0.000284	-0.005223	lbfgs	500	10	tanh
71	70	0.000284	-0.005223	lbfgs	100	10	tanh
72	73	0.000808	-0.005928	sgd	250	10	tanh
73	73	0.000808	-0.005928	sgd	100	10	tanh
74	73	0.000808	-0.005928	sgd	500	10	tanh

Tabela 53: Hiperparâmetros: teddy_data_mlp_m_x_1_err_i

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	76	0.002369	-0.006646	lbfgs	100	(5, 5)	tanh
76	76	0.002369	-0.006646	lbfgs	250	(5, 5)	tanh
77	76	0.002369	-0.006646	lbfgs	500	(5, 5)	tanh
78	79	0.001642	-0.041151	sgd	500	(5, 5)	tanh
79	79	0.001642	-0.041151	sgd	100	(5, 5)	tanh
80	79	0.001642	-0.041151	sgd	250	(5, 5)	tanh
81	82	0.005924	-0.071368	sgd	100	5	logistic
82	82	0.005924	-0.071368	sgd	250	5	logistic
83	82	0.005924	-0.071368	sgd	500	5	logistic
84	85	0.973556	-4.966780	adam	250	10	identity
85	85	0.973556	-4.966780	adam	500	10	identity
86	85	0.973556	-4.966780	adam	100	10	identity
87	88	0.184782	-6.908860	adam	100	5	relu
88	88	0.184782	-6.908860	adam	250	5	relu
89	88	0.184782	-6.908860	adam	500	5	relu
90	91	3.629352	-7.553926	adam	500	(5, 5)	identity
91	91	3.629352	-7.553926	adam	250	(5, 5)	identity
92	91	3.629352	-7.553926	adam	100	(5, 5)	identity
93	94	0.319525	-8.580784	adam	500	5	identity
94	94	0.319525	-8.580784	adam	250	5	identity
95	94	0.319525	-8.580784	adam	100	5	identity
96	97	2.428278	-95.439926	adam	250	10	relu
97	97	2.428278	-95.439926	adam	500	10	relu
98	97	2.428278	-95.439926	adam	100	10	relu
99	100	NaN	NaN	sgd	500	10	identity

Tabela 54: Hiperparâmetros: teddy_data_mlp_m_x_1_err_z

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.009662	0.177032	lbfgs	100	5	identity
1	1	0.009662	0.177032	lbfgs	250	5	identity
2	1	0.009662	0.177032	lbfgs	500	5	identity
3	4	0.002526	0.122507	adam	500	5	logistic
4	4	0.002526	0.122507	adam	250	5	logistic
5	4	0.002526	0.122507	adam	100	5	logistic
6	7	0.004136	0.113602	adam	250	5	tanh
7	7	0.004136	0.113602	adam	100	5	tanh
8	7	0.004136	0.113602	adam	500	5	tanh
9	10	0.009284	0.108203	adam	250	10	tanh
10	10	0.009284	0.108203	adam	500	10	tanh
11	10	0.009284	0.108203	adam	100	10	tanh
12	13	0.010862	0.087948	lbfgs	250	10	relu
13	13	0.010862	0.087948	lbfgs	500	10	relu
14	15	0.017623	0.086157	adam	250	(5, 5)	tanh
15	15	0.017623	0.086157	adam	500	(5, 5)	tanh
16	15	0.017623	0.086157	adam	100	(5, 5)	tanh
17	18	0.041676	0.076423	lbfgs	100	5	relu
18	19	0.041634	0.076391	lbfgs	500	5	relu
19	19	0.041634	0.076391	lbfgs	250	5	relu
20	21	0.047990	0.069554	lbfgs	250	(5, 5)	identity
21	21	0.047990	0.069554	lbfgs	500	(5, 5)	identity
22	23	0.016306	0.060361	adam	100	10	logistic
23	23	0.016306	0.060361	adam	500	10	logistic
24	23	0.016306	0.060361	adam	250	10	logistic

Tabela 55: Hiperparâmetros: teddy_data_mlp_m_x_1_err_z

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	26	0.019439	0.054777	lbfgs	100	(5, 5)	identity
26	27	0.148149	0.053654	lbfgs	250	10	identity
27	27	0.148149	0.053654	lbfgs	500	10	identity
28	29	0.001984	0.052457	adam	100	(5, 5)	logistic
29	29	0.001984	0.052457	adam	250	(5, 5)	logistic
30	29	0.001984	0.052457	adam	500	(5, 5)	logistic
31	32	0.018185	0.047752	lbfgs	100	10	logistic
32	32	0.018185	0.047752	lbfgs	250	10	logistic
33	32	0.018185	0.047752	lbfgs	500	10	logistic
34	35	0.001041	0.022201	lbfgs	250	5	logistic
35	35	0.001041	0.022201	lbfgs	500	5	logistic
36	35	0.001041	0.022201	lbfgs	100	5	logistic
37	38	0.000469	0.019124	sgd	100	10	logistic
38	38	0.000469	0.019124	sgd	250	10	logistic
39	38	0.000469	0.019124	sgd	500	10	logistic
40	41	0.177288	0.002054	lbfgs	100	10	relu
41	42	0.000149	0.001708	sgd	500	(5, 5)	logistic
42	42	0.000149	0.001708	sgd	250	(5, 5)	logistic
43	42	0.000149	0.001708	sgd	100	(5, 5)	logistic
44	45	0.000191	-0.000134	sgd	500	10	relu
45	45	0.000191	-0.000134	sgd	250	10	relu
46	45	0.000191	-0.000134	sgd	100	10	relu
47	48	0.000160	-0.000136	sgd	250	(5, 5)	relu
48	48	0.000160	-0.000136	sgd	500	(5, 5)	relu
49	48	0.000160	-0.000136	sgd	100	(5, 5)	relu

Tabela 56: Hiperparâmetros: teddy_data_mlp_m_x_1_err_z

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	51	0.000173	-0.000138	lbfgs	100	(5, 5)	logistic
51	51	0.000173	-0.000138	lbfgs	500	(5, 5)	logistic
52	51	0.000173	-0.000138	lbfgs	250	(5, 5)	logistic
53	54	0.000174	-0.000139	lbfgs	100	(5, 5)	relu
54	54	0.000174	-0.000139	lbfgs	250	(5, 5)	relu
55	54	0.000174	-0.000139	lbfgs	500	(5, 5)	relu
56	57	0.000174	-0.000139	lbfgs	100	5	tanh
57	57	0.000174	-0.000139	lbfgs	250	5	tanh
58	57	0.000174	-0.000139	lbfgs	500	5	tanh
59	60	0.000247	-0.000150	sgd	100	5	relu
60	60	0.000247	-0.000150	sgd	250	5	relu
61	60	0.000247	-0.000150	sgd	500	5	relu
62	63	0.000206	-0.000250	sgd	100	5	tanh
63	63	0.000206	-0.000250	sgd	250	5	tanh
64	63	0.000206	-0.000250	sgd	500	5	tanh
65	66	0.000181	-0.000301	adam	500	(5, 5)	relu
66	66	0.000181	-0.000301	adam	250	(5, 5)	relu
67	66	0.000181	-0.000301	adam	100	(5, 5)	relu
68	69	0.001168	-0.001272	lbfgs	500	(5, 5)	tanh
69	69	0.001168	-0.001272	lbfgs	250	(5, 5)	tanh
70	69	0.001168	-0.001272	lbfgs	100	(5, 5)	tanh
71	72	0.000234	-0.001711	lbfgs	500	10	tanh
72	72	0.000234	-0.001711	lbfgs	100	10	tanh
73	72	0.000234	-0.001711	lbfgs	250	10	tanh
74	75	0.000489	-0.002028	sgd	500	10	tanh

Tabela 57: Hiperparâmetros: teddy_data_mlp_m_x_1_err_z

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	75	0.000489	-0.002028	sgd	250	10	tanh
76	75	0.000489	-0.002028	sgd	100	10	tanh
77	78	0.000608	-0.013715	sgd	100	(5, 5)	tanh
78	78	0.000608	-0.013715	sgd	250	(5, 5)	tanh
79	78	0.000608	-0.013715	sgd	500	(5, 5)	tanh
80	81	0.002227	-0.018465	sgd	100	5	logistic
81	81	0.002227	-0.018465	sgd	500	5	logistic
82	81	0.002227	-0.018465	sgd	250	5	logistic
83	84	0.182146	-0.066525	lbfgs	100	10	identity
84	85	1.126040	-2.258059	adam	250	10	identity
85	85	1.126040	-2.258059	adam	500	10	identity
86	85	1.126040	-2.258059	adam	100	10	identity
87	88	0.721664	-2.676359	adam	500	(5, 5)	identity
88	88	0.721664	-2.676359	adam	250	(5, 5)	identity
89	88	0.721664	-2.676359	adam	100	(5, 5)	identity
90	91	0.070055	-2.708160	adam	100	5	relu
91	91	0.070055	-2.708160	adam	500	5	relu
92	91	0.070055	-2.708160	adam	250	5	relu
93	94	0.095289	-3.114499	adam	100	5	identity
94	94	0.095289	-3.114499	adam	500	5	identity
95	94	0.095289	-3.114499	adam	250	5	identity
96	97	0.696169	-35.179943	adam	100	10	relu
97	97	0.696169	-35.179943	adam	500	10	relu
98	97	0.696169	-35.179943	adam	250	10	relu
99	100	NaN	NaN	sgd	500	5	identity

Tabela 58: Hiperparâmetros: teddy_data_rf_m_x_1_err_u

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.003357	0.734972	absolute_error
2	0.002719	0.732851	squared_error
3	0.002807	0.732620	poisson

Tabela 59: Hiperparâmetros: teddy_data_rf_m_x_1_err_g

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.005645	0.752544	absolute_error
2	0.006060	0.750796	squared_error
3	0.005665	0.750611	poisson

Tabela 60: Hiperparâmetros: teddy_data_rf_m_x_1_err_r

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.010402	0.532478	absolute_error
2	0.009690	0.528821	squared_error
3	0.010283	0.528323	poisson

Tabela 61: Hiperparâmetros: teddy_data_rf_m_x_1_err_i

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.012687	0.316958	absolute_error
2	0.014187	0.312662	poisson
3	0.013517	0.311223	squared_error

Tabela 62: Hiperparâmetros: teddy_data_rf_m_x_1_err_z

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.008756	0.272709	absolute_error
2	0.008024	0.268157	poisson
3	0.008325	0.267451	squared_error

Tabela 63: Hiperparâmetros: teddy_data_xgb_m_x_1_err_u

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.003172	0.741077	reg:squarederror	5
2	0.002943	0.725173	reg:squarederror	1
3	0.002990	0.722068	reg:squarederror	10

Tabela 64: Hiperparâmetros: teddy_data_xgb_m_x_1_err_g

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.005673	0.755717	reg:squarederror	5
2	0.007914	0.740507	reg:squarederror	10
3	0.005861	0.727498	reg:squarederror	1

Tabela 65: Hiperparâmetros: teddy_data_xgb_m_x_1_err_r

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.007469	0.534264	reg:squarederror	5
2	0.009087	0.510315	reg:squarederror	10
3	0.006805	0.472825	reg:squarederror	1

Tabela 66: Hiperparâmetros: teddy_data_xgb_m_x_1_err_i

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.014747	0.326475	reg:squarederror	5
2	0.016523	0.289636	reg:squarederror	10
3	0.008816	0.260083	reg:squarederror	1

Tabela 67: Hiperparâmetros: teddy_data_xgb_m_x_1_err_z

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.008841	0.280290	reg:squarederror	5
2	0.010965	0.242844	reg:squarederror	10
3	0.003625	0.208456	reg:squarederror	1

Tabela 68: Hiperparâmetros: teddy_data_dt_1_x_1_u_err_u

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.003087	0.717186	best	5	poisson
2	0.003242	0.716500	best	5	squared_error
2	0.003242	0.716500	best	5	friedman_mse
4	0.003873	0.706971	best	5	absolute_error
5	0.009493	0.706482	random	10	poisson
5	0.009493	0.706482	random	10	squared_error
5	0.009493	0.706482	random	10	friedman_mse
8	0.005147	0.700828	best	10	poisson
9	0.004953	0.700258	best	10	squared_error
9	0.004953	0.700258	best	10	friedman_mse
11	0.003653	0.697437	best	10	absolute_error
12	0.009519	0.695601	random	10	absolute_error
13	0.004682	0.693597	random	15	friedman_mse
13	0.004682	0.693597	random	15	squared_error
13	0.004682	0.693597	random	15	poisson
16	0.005010	0.684663	random	15	absolute_error
17	0.006994	0.664728	best	15	absolute_error
18	0.011043	0.652477	best	15	poisson
19	0.011410	0.651863	best	15	friedman_mse
19	0.011410	0.651863	best	15	squared_error
21	0.156547	0.266624	random	5	friedman_mse
21	0.156547	0.266624	random	5	poisson
21	0.156547	0.266624	random	5	squared_error
24	0.164375	0.229333	random	5	absolute_error

Tabela 69: Hiperparâmetros: teddy_data_dt_1_x_1_g_err_g

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.005718	0.726562	best	5	poisson
2	0.005536	0.725489	best	5	squared_error
2	0.005536	0.725489	best	5	friedman_mse
4	0.004319	0.723247	random	10	poisson
4	0.004319	0.723247	random	10	squared_error
4	0.004319	0.723247	random	10	friedman_mse
7	0.006157	0.718022	best	5	absolute_error
8	0.004281	0.714997	random	10	absolute_error
9	0.005497	0.709945	best	10	absolute_error
10	0.004877	0.709206	best	10	poisson
11	0.005687	0.706878	best	10	squared_error
11	0.005687	0.706878	best	10	friedman_mse
13	0.013308	0.704741	random	15	friedman_mse
13	0.013308	0.704741	random	15	squared_error
13	0.013308	0.704741	random	15	poisson
16	0.013763	0.697782	random	15	absolute_error
17	0.006694	0.676931	best	15	absolute_error
18	0.012857	0.666534	best	15	friedman_mse
18	0.012857	0.666534	best	15	squared_error
20	0.015810	0.661947	best	15	poisson
21	0.021009	0.647414	random	5	friedman_mse
21	0.021009	0.647414	random	5	poisson
21	0.021009	0.647414	random	5	squared_error
24	0.021136	0.636844	random	5	absolute_error

Tabela 70: Hiperparâmetros: teddy_data_dt_1_x_1_r_err_r

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.006653	0.458838	best	5	poisson
2	0.007528	0.458150	best	5	squared_error
2	0.007528	0.458150	best	5	friedman_mse
4	0.015232	0.446640	random	10	poisson
4	0.015232	0.446640	random	10	squared_error
4	0.015232	0.446640	random	10	friedman_mse
7	0.006441	0.439923	best	5	absolute_error
8	0.015162	0.425247	random	10	absolute_error
9	0.007789	0.424865	best	10	absolute_error
10	0.011948	0.424332	best	10	squared_error
10	0.011948	0.424332	best	10	friedman_mse
12	0.008945	0.423032	random	15	friedman_mse
12	0.008945	0.423032	random	15	squared_error
12	0.008945	0.423032	random	15	poisson
15	0.012936	0.422970	best	10	poisson
16	0.008341	0.405414	random	15	absolute_error
17	0.013452	0.370997	best	15	absolute_error
18	0.014299	0.355560	best	15	friedman_mse
18	0.014299	0.355560	best	15	squared_error
20	0.014998	0.353168	best	15	poisson
21	0.119230	0.349776	random	5	friedman_mse
21	0.119230	0.349776	random	5	poisson
21	0.119230	0.349776	random	5	squared_error
24	0.133176	0.322514	random	5	absolute_error

Tabela 71: Hiperparâmetros: teddy_data_dt_1_x_1_i_err_i

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.009588	0.224261	best	5	squared_error
1	0.009588	0.224261	best	5	friedman_mse
3	0.009089	0.224231	best	5	poisson
4	0.013699	0.222024	random	10	squared_error
4	0.013699	0.222024	random	10	poisson
4	0.013699	0.222024	random	10	friedman_mse
7	0.009742	0.198529	best	5	absolute_error
8	0.013050	0.194669	random	10	absolute_error
9	0.018854	0.190951	random	5	squared_error
9	0.018854	0.190951	random	5	friedman_mse
9	0.018854	0.190951	random	5	poisson
12	0.010436	0.186151	best	10	poisson
13	0.009693	0.184599	best	10	squared_error
13	0.009693	0.184599	best	10	friedman_mse
15	0.008593	0.180210	best	10	absolute_error
16	0.019095	0.168418	random	15	friedman_mse
16	0.019095	0.168418	random	15	squared_error
16	0.019095	0.168418	random	15	poisson
19	0.018975	0.161679	random	5	absolute_error
20	0.021736	0.144354	random	15	absolute_error
21	0.008821	0.113904	best	15	absolute_error
22	0.026236	0.097902	best	15	poisson
23	0.022593	0.090826	best	15	friedman_mse
23	0.022593	0.090826	best	15	squared_error

Tabela 72: Hiperparâmetros: teddy_data_dt_1_x_1_z_err_z

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.002873	0.181190	best	5	poisson
2	0.002365	0.180494	best	5	squared_error
2	0.002365	0.180494	best	5	friedman_mse
4	0.009015	0.174568	random	10	squared_error
4	0.009015	0.174568	random	10	poisson
4	0.009015	0.174568	random	10	friedman_mse
7	0.004529	0.156472	best	5	absolute_error
8	0.009837	0.152163	best	10	squared_error
8	0.009837	0.152163	best	10	friedman_mse
10	0.009610	0.149886	random	10	absolute_error
11	0.010098	0.149634	best	10	poisson
12	0.020557	0.148032	random	5	squared_error
12	0.020557	0.148032	random	5	friedman_mse
12	0.020557	0.148032	random	5	poisson
15	0.006206	0.134211	best	10	absolute_error
16	0.020794	0.122685	random	5	absolute_error
17	0.018976	0.110532	random	15	friedman_mse
17	0.018976	0.110532	random	15	squared_error
17	0.018976	0.110532	random	15	poisson
20	0.021783	0.087719	random	15	absolute_error
21	0.013144	0.071351	best	15	absolute_error
22	0.013407	0.070927	best	15	friedman_mse
22	0.013407	0.070927	best	15	squared_error
24	0.017355	0.064891	best	15	poisson

Tabela 73: Hiperparâmetros: teddy_data_knn_1_x_1_u_err_u

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.005193	0.689627	uniform	2	10	brute
1	2	0.005215	0.689620	uniform	1	10	brute
2	2	0.005215	0.689620	uniform	3	10	brute
3	4	0.005215	0.689609	uniform	3	10	ball_tree
4	4	0.005215	0.689609	uniform	2	10	ball_tree
5	4	0.005215	0.689609	uniform	1	10	ball_tree
6	7	0.005189	0.689596	uniform	1	10	kd_tree
7	7	0.005189	0.689596	uniform	2	10	kd_tree
8	7	0.005189	0.689596	uniform	3	10	kd_tree
9	10	0.006198	0.663347	uniform	1	5	brute
10	10	0.006198	0.663347	uniform	3	5	brute
11	12	0.006109	0.663317	uniform	3	5	kd_tree
12	12	0.006109	0.663317	uniform	2	5	kd_tree
13	12	0.006109	0.663317	uniform	1	5	kd_tree
14	15	0.006215	0.663315	uniform	2	5	brute
15	16	0.006048	0.663282	uniform	2	5	ball_tree
16	16	0.006048	0.663282	uniform	1	5	ball_tree
17	16	0.006048	0.663282	uniform	3	5	ball_tree
18	19	0.007434	0.639696	distance	2	10	brute
19	20	0.007442	0.639687	distance	1	10	brute
20	20	0.007442	0.639687	distance	3	10	brute
21	22	0.007431	0.639685	distance	3	10	kd_tree
22	22	0.007431	0.639685	distance	2	10	kd_tree
23	22	0.007431	0.639685	distance	1	10	kd_tree
24	25	0.007445	0.639682	distance	1	10	ball_tree

Tabela 74: Hiperparâmetros: teddy_data_knn_1_x_1_u_err_u

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	25	0.007445	0.639682	distance	2	10	ball_tree
26	25	0.007445	0.639682	distance	3	10	ball_tree
27	28	0.008193	0.614595	distance	3	5	brute
28	28	0.008193	0.614595	distance	1	5	brute
29	30	0.008174	0.614585	distance	3	5	kd_tree
30	30	0.008174	0.614585	distance	1	5	kd_tree
31	30	0.008174	0.614585	distance	2	5	kd_tree
32	33	0.008206	0.614583	distance	2	5	brute
33	34	0.008153	0.614575	distance	2	5	ball_tree
34	34	0.008153	0.614575	distance	3	5	ball_tree
35	34	0.008153	0.614575	distance	1	5	ball_tree
36	37	0.015798	0.438868	uniform	2	1	brute
37	37	0.015798	0.438868	distance	2	1	brute
38	39	0.016589	0.438729	uniform	3	1	ball_tree
39	39	0.016589	0.438729	distance	2	1	ball_tree
40	39	0.016589	0.438729	uniform	2	1	ball_tree
41	39	0.016589	0.438729	distance	1	1	ball_tree
42	39	0.016589	0.438729	distance	3	1	ball_tree
43	39	0.016589	0.438729	uniform	1	1	ball_tree
44	45	0.016585	0.438726	distance	2	1	kd_tree
45	45	0.016585	0.438726	uniform	2	1	kd_tree
46	45	0.016585	0.438726	uniform	1	1	kd_tree
47	45	0.016585	0.438726	distance	1	1	kd_tree
48	45	0.016585	0.438726	distance	3	1	kd_tree
49	45	0.016585	0.438726	uniform	3	1	kd_tree

Tabela 75: Hiperparâmetros: teddy_data_knn_1_x_1_g_err_g

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.006162	0.701917	uniform	1	10	kd_tree
1	1	0.006162	0.701917	uniform	2	10	kd_tree
2	1	0.006162	0.701917	uniform	3	10	kd_tree
3	4	0.006157	0.701907	uniform	1	10	ball_tree
4	4	0.006157	0.701907	uniform	3	10	ball_tree
5	4	0.006157	0.701907	uniform	2	10	ball_tree
6	7	0.006185	0.701889	uniform	2	10	brute
7	8	0.006162	0.701889	uniform	1	10	brute
8	8	0.006162	0.701889	uniform	3	10	brute
9	10	0.005299	0.673690	uniform	3	5	brute
10	10	0.005299	0.673690	uniform	1	5	brute
11	12	0.005117	0.673658	uniform	3	5	kd_tree
12	12	0.005117	0.673658	uniform	2	5	kd_tree
13	12	0.005117	0.673658	uniform	1	5	kd_tree
14	15	0.005328	0.673568	uniform	2	5	brute
15	16	0.005091	0.673554	uniform	2	5	ball_tree
16	16	0.005091	0.673554	uniform	1	5	ball_tree
17	16	0.005091	0.673554	uniform	3	5	ball_tree
18	19	0.008986	0.651664	distance	3	10	kd_tree
19	19	0.008986	0.651664	distance	2	10	kd_tree
20	19	0.008986	0.651664	distance	1	10	kd_tree
21	22	0.008985	0.651658	distance	1	10	ball_tree
22	22	0.008985	0.651658	distance	2	10	ball_tree
23	22	0.008985	0.651658	distance	3	10	ball_tree
24	25	0.008991	0.651653	distance	1	10	brute

Tabela 76: Hiperparâmetros: teddy_data_knn_1_x_1_g_err_g

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	25	0.008991	0.651653	distance	3	10	brute
26	27	0.008995	0.651648	distance	2	10	brute
27	28	0.009426	0.626948	distance	1	5	brute
28	28	0.009426	0.626948	distance	3	5	brute
29	30	0.009347	0.626924	distance	2	5	kd_tree
30	30	0.009347	0.626924	distance	3	5	kd_tree
31	30	0.009347	0.626924	distance	1	5	kd_tree
32	33	0.009419	0.626885	distance	2	5	brute
33	34	0.009332	0.626873	distance	1	5	ball_tree
34	34	0.009332	0.626873	distance	2	5	ball_tree
35	34	0.009332	0.626873	distance	3	5	ball_tree
36	37	0.017189	0.462617	uniform	1	1	kd_tree
37	37	0.017189	0.462617	distance	1	1	kd_tree
38	37	0.017189	0.462617	uniform	2	1	kd_tree
39	37	0.017189	0.462617	distance	2	1	kd_tree
40	37	0.017189	0.462617	uniform	3	1	kd_tree
41	37	0.017189	0.462617	distance	3	1	kd_tree
42	43	0.017195	0.462607	distance	3	1	ball_tree
43	44	0.017195	0.462607	distance	1	1	ball_tree
44	44	0.017195	0.462607	uniform	2	1	ball_tree
45	44	0.017195	0.462607	distance	2	1	ball_tree
46	44	0.017195	0.462607	uniform	1	1	ball_tree
47	44	0.017195	0.462607	uniform	3	1	ball_tree
48	49	0.018216	0.460913	uniform	3	1	brute
49	49	0.018216	0.460913	distance	1	1	brute

Tabela 77: Hiperparâmetros: teddy_data_knn_1_x_1_r_err_r

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.011425	0.411382	uniform	1	10	ball_tree
1	1	0.011425	0.411382	uniform	3	10	ball_tree
2	1	0.011425	0.411382	uniform	2	10	ball_tree
3	4	0.011463	0.411362	uniform	2	10	brute
4	5	0.011445	0.411351	uniform	1	10	brute
5	5	0.011445	0.411351	uniform	3	10	brute
6	7	0.011434	0.411338	uniform	1	10	kd_tree
7	7	0.011434	0.411338	uniform	2	10	kd_tree
8	7	0.011434	0.411338	uniform	3	10	kd_tree
9	10	0.013535	0.361808	uniform	2	5	brute
10	11	0.013590	0.361804	uniform	3	5	brute
11	11	0.013590	0.361804	uniform	1	5	brute
12	13	0.013547	0.361763	uniform	3	5	kd_tree
13	13	0.013547	0.361763	uniform	2	5	kd_tree
14	13	0.013547	0.361763	uniform	1	5	kd_tree
15	16	0.013396	0.361671	uniform	3	5	ball_tree
16	16	0.013396	0.361671	uniform	2	5	ball_tree
17	16	0.013396	0.361671	uniform	1	5	ball_tree
18	19	0.012663	0.316924	distance	2	10	ball_tree
19	19	0.012663	0.316924	distance	3	10	ball_tree
20	19	0.012663	0.316924	distance	1	10	ball_tree
21	22	0.012673	0.316920	distance	2	10	brute
22	23	0.012655	0.316916	distance	3	10	kd_tree
23	23	0.012655	0.316916	distance	2	10	kd_tree
24	23	0.012655	0.316916	distance	1	10	kd_tree

Tabela 78: Hiperparâmetros: teddy_data_knn_1_x_1_r_err_r

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	26	0.012684	0.316908	distance	3	10	brute
26	27	0.012684	0.316908	distance	1	10	brute
27	28	0.013921	0.270147	distance	2	5	brute
28	29	0.013941	0.270134	distance	3	5	brute
29	29	0.013941	0.270134	distance	1	5	brute
30	31	0.013917	0.270096	distance	2	5	kd_tree
31	31	0.013917	0.270096	distance	3	5	kd_tree
32	31	0.013917	0.270096	distance	1	5	kd_tree
33	34	0.013878	0.270066	distance	1	5	ball_tree
34	34	0.013878	0.270066	distance	2	5	ball_tree
35	34	0.013878	0.270066	distance	3	5	ball_tree
36	37	0.020073	-0.055583	uniform	2	1	brute
37	37	0.020073	-0.055583	distance	2	1	brute
38	39	0.019032	-0.055734	distance	1	1	brute
39	40	0.019032	-0.055734	distance	3	1	brute
40	41	0.019032	-0.055734	uniform	1	1	brute
41	41	0.019032	-0.055734	uniform	3	1	brute
42	43	0.017782	-0.061620	uniform	1	1	kd_tree
43	43	0.017782	-0.061620	uniform	2	1	kd_tree
44	43	0.017782	-0.061620	uniform	3	1	kd_tree
45	46	0.017782	-0.061620	distance	3	1	kd_tree
46	46	0.017782	-0.061620	distance	1	1	kd_tree
47	46	0.017782	-0.061620	distance	2	1	kd_tree
48	49	0.017783	-0.061630	uniform	3	1	ball_tree
49	49	0.017783	-0.061630	uniform	2	1	ball_tree

Tabela 79: Hiperparâmetros: teddy_data_knn_1_x_1_i_err_i

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.007827	0.154722	uniform	3	10	ball_tree
1	1	0.007827	0.154722	uniform	2	10	ball_tree
2	1	0.007827	0.154722	uniform	1	10	ball_tree
3	4	0.007855	0.154658	uniform	1	10	brute
4	4	0.007855	0.154658	uniform	3	10	brute
5	6	0.007826	0.154615	uniform	3	10	kd_tree
6	6	0.007826	0.154615	uniform	2	10	kd_tree
7	6	0.007826	0.154615	uniform	1	10	kd_tree
8	9	0.007974	0.154608	uniform	2	10	brute
9	10	0.007075	0.077307	uniform	1	5	ball_tree
10	10	0.007075	0.077307	uniform	2	5	ball_tree
11	10	0.007075	0.077307	uniform	3	5	ball_tree
12	13	0.007115	0.077205	uniform	2	5	brute
13	14	0.007009	0.077171	uniform	3	5	kd_tree
14	14	0.007009	0.077171	uniform	2	5	kd_tree
15	14	0.007009	0.077171	uniform	1	5	kd_tree
16	17	0.007277	0.077083	uniform	3	5	brute
17	17	0.007277	0.077083	uniform	1	5	brute
18	19	0.012423	0.008021	distance	1	10	brute
19	19	0.012423	0.008021	distance	3	10	brute
20	21	0.012427	0.008011	distance	3	10	ball_tree
21	21	0.012427	0.008011	distance	2	10	ball_tree
22	21	0.012427	0.008011	distance	1	10	ball_tree
23	24	0.012461	0.007994	distance	2	10	brute
24	25	0.012445	0.007978	distance	2	10	kd_tree

Tabela 80: Hiperparâmetros: teddy_data_knn_1_x_1_i_err_i

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	25	0.012445	0.007978	distance	1	10	kd_tree
26	27	0.012445	0.007978	distance	3	10	kd_tree
27	28	0.014086	-0.061888	distance	2	5	brute
28	29	0.014008	-0.061923	distance	1	5	ball_tree
29	29	0.014008	-0.061923	distance	2	5	ball_tree
30	29	0.014008	-0.061923	distance	3	5	ball_tree
31	32	0.014096	-0.061926	distance	3	5	brute
32	32	0.014096	-0.061926	distance	1	5	brute
33	34	0.014030	-0.061945	distance	3	5	kd_tree
34	35	0.014030	-0.061945	distance	2	5	kd_tree
35	35	0.014030	-0.061945	distance	1	5	kd_tree
36	37	0.036304	-0.547478	uniform	2	1	brute
37	37	0.036304	-0.547478	distance	2	1	brute
38	39	0.036541	-0.548207	uniform	3	1	brute
39	39	0.036541	-0.548207	uniform	1	1	brute
40	41	0.036541	-0.548207	distance	1	1	brute
41	41	0.036541	-0.548207	distance	3	1	brute
42	43	0.037864	-0.550233	distance	3	1	ball_tree
43	43	0.037864	-0.550233	distance	2	1	ball_tree
44	43	0.037864	-0.550233	distance	1	1	ball_tree
45	46	0.037864	-0.550233	uniform	2	1	ball_tree
46	46	0.037864	-0.550233	uniform	1	1	ball_tree
47	46	0.037864	-0.550233	uniform	3	1	ball_tree
48	49	0.037839	-0.550242	distance	1	1	kd_tree
49	49	0.037839	-0.550242	distance	2	1	kd_tree

Tabela 81: Hiperparâmetros: teddy_data_knn_1_x_1_z_err_z

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.006991	0.102560	uniform	1	10	kd_tree
1	1	0.006991	0.102560	uniform	3	10	kd_tree
2	1	0.006991	0.102560	uniform	2	10	kd_tree
3	4	0.007050	0.102551	uniform	1	10	ball_tree
4	4	0.007050	0.102551	uniform	2	10	ball_tree
5	4	0.007050	0.102551	uniform	3	10	ball_tree
6	7	0.007187	0.102421	uniform	1	10	brute
7	7	0.007187	0.102421	uniform	3	10	brute
8	9	0.007248	0.102390	uniform	2	10	brute
9	10	0.007029	0.023153	uniform	2	5	brute
10	11	0.006996	0.023087	uniform	3	5	brute
11	11	0.006996	0.023087	uniform	1	5	brute
12	13	0.007045	0.022917	uniform	1	5	ball_tree
13	13	0.007045	0.022917	uniform	2	5	ball_tree
14	13	0.007045	0.022917	uniform	3	5	ball_tree
15	16	0.007032	0.022795	uniform	3	5	kd_tree
16	16	0.007032	0.022795	uniform	2	5	kd_tree
17	16	0.007032	0.022795	uniform	1	5	kd_tree
18	19	0.011346	-0.047543	distance	2	10	kd_tree
19	19	0.011346	-0.047543	distance	1	10	kd_tree
20	19	0.011346	-0.047543	distance	3	10	kd_tree
21	22	0.011356	-0.047567	distance	3	10	ball_tree
22	23	0.011356	-0.047567	distance	1	10	ball_tree
23	23	0.011356	-0.047567	distance	2	10	ball_tree
24	25	0.011374	-0.047599	distance	1	10	brute

Tabela 82: Hiperparâmetros: teddy_data_knn_1_x_1_z_err_z

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	25	0.011374	-0.047599	distance	3	10	brute
26	27	0.011403	-0.047617	distance	2	10	brute
27	28	0.012412	-0.121183	distance	2	5	brute
28	29	0.012407	-0.121209	distance	1	5	brute
29	30	0.012407	-0.121209	distance	3	5	brute
30	31	0.012495	-0.121239	distance	1	5	ball_tree
31	31	0.012495	-0.121239	distance	2	5	ball_tree
32	33	0.012495	-0.121239	distance	3	5	ball_tree
33	34	0.012493	-0.121284	distance	1	5	kd_tree
34	34	0.012493	-0.121284	distance	3	5	kd_tree
35	34	0.012493	-0.121284	distance	2	5	kd_tree
36	37	0.018344	-0.630234	distance	1	1	kd_tree
37	37	0.018344	-0.630234	uniform	1	1	kd_tree
38	37	0.018344	-0.630234	distance	2	1	kd_tree
39	37	0.018344	-0.630234	uniform	3	1	kd_tree
40	37	0.018344	-0.630234	uniform	2	1	kd_tree
41	37	0.018344	-0.630234	distance	3	1	kd_tree
42	43	0.018343	-0.630250	uniform	3	1	ball_tree
43	43	0.018343	-0.630250	distance	1	1	ball_tree
44	43	0.018343	-0.630250	uniform	2	1	ball_tree
45	43	0.018343	-0.630250	distance	2	1	ball_tree
46	43	0.018343	-0.630250	uniform	1	1	ball_tree
47	43	0.018343	-0.630250	distance	3	1	ball_tree
48	49	0.018380	-0.630717	uniform	2	1	brute
49	49	0.018380	-0.630717	distance	2	1	brute

Tabela 83: Hiperparâmetros: teddy_data_mlp_1_x_1_u_err_u

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.003975	0.711663	lbfgs	250	10	tanh
1	1	0.003975	0.711663	lbfgs	500	10	tanh
2	3	0.003952	0.711497	lbfgs	250	(5, 5)	tanh
3	3	0.003952	0.711497	lbfgs	500	(5, 5)	tanh
4	5	0.005594	0.709894	lbfgs	500	5	tanh
5	6	0.013670	0.704624	lbfgs	500	5	logistic
6	7	0.011783	0.703906	lbfgs	250	5	tanh
7	8	0.013061	0.701443	lbfgs	250	5	logistic
8	9	0.019985	0.698668	lbfgs	500	(5, 5)	logistic
9	10	0.019813	0.698413	lbfgs	250	(5, 5)	logistic
10	11	0.009758	0.696495	lbfgs	100	10	tanh
11	12	0.015050	0.689734	lbfgs	500	10	logistic
12	13	0.006062	0.686677	lbfgs	100	(5, 5)	tanh
13	14	0.013753	0.681502	lbfgs	250	10	logistic
14	15	0.007608	0.678950	lbfgs	100	5	tanh
15	16	0.003734	0.675552	adam	500	(5, 5)	logistic
16	16	0.003734	0.675552	adam	100	(5, 5)	logistic
17	16	0.003734	0.675552	adam	250	(5, 5)	logistic
18	19	0.003219	0.675344	lbfgs	500	(5, 5)	relu
19	19	0.003219	0.675344	lbfgs	250	(5, 5)	relu
20	19	0.003219	0.675344	lbfgs	100	(5, 5)	relu
21	22	0.003014	0.675341	lbfgs	100	(5, 5)	logistic
22	23	0.003220	0.675339	lbfgs	250	(5, 5)	identity
23	23	0.003220	0.675339	lbfgs	500	(5, 5)	identity
24	23	0.003220	0.675339	lbfgs	100	(5, 5)	identity

Tabela 84: Hiperparâmetros: teddy_data_mlp_1_x_1_u_err_u

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	26	0.003220	0.675339	lbfgs	500	10	relu
26	26	0.003220	0.675339	lbfgs	250	10	relu
27	26	0.003220	0.675339	lbfgs	100	10	relu
28	29	0.003220	0.675339	lbfgs	100	5	relu
29	29	0.003220	0.675339	lbfgs	500	5	relu
30	29	0.003220	0.675339	lbfgs	250	5	relu
31	32	0.003220	0.675339	lbfgs	100	5	identity
32	32	0.003220	0.675339	lbfgs	250	5	identity
33	32	0.003220	0.675339	lbfgs	500	5	identity
34	35	0.003220	0.675339	lbfgs	250	10	identity
35	35	0.003220	0.675339	lbfgs	100	10	identity
36	35	0.003220	0.675339	lbfgs	500	10	identity
37	38	0.006069	0.675190	lbfgs	100	5	logistic
38	39	0.004176	0.672358	adam	100	5	identity
39	39	0.004176	0.672358	adam	250	5	identity
40	39	0.004176	0.672358	adam	500	5	identity
41	42	0.005972	0.671237	adam	500	10	relu
42	42	0.005972	0.671237	adam	250	10	relu
43	42	0.005972	0.671237	adam	100	10	relu
44	45	0.005044	0.671174	lbfgs	100	10	logistic
45	46	0.009036	0.670830	adam	100	10	tanh
46	46	0.009036	0.670830	adam	250	10	tanh
47	46	0.009036	0.670830	adam	500	10	tanh
48	49	0.003470	0.670284	adam	250	(5, 5)	tanh
49	49	0.003470	0.670284	adam	100	(5, 5)	tanh

Tabela 85: Hiperparâmetros: teddy_data_mlp_1_x_1_u_err_u

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	49	0.003470	0.670284	adam	500	(5, 5)	tanh
51	52	0.005560	0.670183	adam	100	5	relu
52	52	0.005560	0.670183	adam	250	5	relu
53	52	0.005560	0.670183	adam	500	5	relu
54	55	0.007078	0.670170	adam	500	(5, 5)	relu
55	55	0.007078	0.670170	adam	100	(5, 5)	relu
56	55	0.007078	0.670170	adam	250	(5, 5)	relu
57	58	0.003593	0.666617	adam	250	10	logistic
58	58	0.003593	0.666617	adam	100	10	logistic
59	58	0.003593	0.666617	adam	500	10	logistic
60	61	0.006779	0.663000	adam	100	5	tanh
61	61	0.006779	0.663000	adam	250	5	tanh
62	61	0.006779	0.663000	adam	500	5	tanh
63	64	0.004991	0.661579	adam	250	5	logistic
64	64	0.004991	0.661579	adam	100	5	logistic
65	64	0.004991	0.661579	adam	500	5	logistic
66	67	0.019855	0.660179	adam	250	(5, 5)	identity
67	67	0.019855	0.660179	adam	500	(5, 5)	identity
68	67	0.019855	0.660179	adam	100	(5, 5)	identity
69	70	0.006086	0.652443	sgd	250	(5, 5)	relu
70	70	0.006086	0.652443	sgd	100	(5, 5)	relu
71	70	0.006086	0.652443	sgd	500	(5, 5)	relu
72	73	0.019577	0.622443	sgd	500	(5, 5)	identity
73	73	0.019577	0.622443	sgd	250	(5, 5)	identity
74	73	0.019577	0.622443	sgd	100	(5, 5)	identity

Tabela 86: Hiperparâmetros: teddy_data_mlp_1_x_1_u_err_u

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	76	0.004136	0.563790	sgd	100	5	identity
76	76	0.004136	0.563790	sgd	500	5	identity
77	76	0.004136	0.563790	sgd	250	5	identity
78	79	0.007191	0.433709	sgd	100	5	relu
79	79	0.007191	0.433709	sgd	250	5	relu
80	79	0.007191	0.433709	sgd	500	5	relu
81	82	0.001082	0.140271	sgd	100	5	tanh
82	82	0.001082	0.140271	sgd	500	5	tanh
83	82	0.001082	0.140271	sgd	250	5	tanh
84	85	0.000613	0.097442	sgd	500	10	logistic
85	85	0.000613	0.097442	sgd	100	10	logistic
86	85	0.000613	0.097442	sgd	250	10	logistic
87	88	0.000385	0.082546	sgd	500	5	logistic
88	88	0.000385	0.082546	sgd	250	5	logistic
89	88	0.000385	0.082546	sgd	100	5	logistic
90	91	0.002442	0.044662	sgd	100	10	tanh
91	91	0.002442	0.044662	sgd	250	10	tanh
92	91	0.002442	0.044662	sgd	500	10	tanh
93	94	0.000537	0.041823	adam	100	10	identity
94	94	0.000537	0.041823	adam	250	10	identity
95	94	0.000537	0.041823	adam	500	10	identity
96	97	0.000095	0.004502	sgd	250	(5, 5)	logistic
97	97	0.000095	0.004502	sgd	500	(5, 5)	logistic
98	97	0.000095	0.004502	sgd	100	(5, 5)	logistic
99	100	0.000141	0.003401	sgd	500	(5, 5)	tanh

Tabela 87: Hiperparâmetros: teddy_data_mlp_1_x_1_g_err_g

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.005659	0.660643	lbfgs	250	10	identity
1	1	0.005659	0.660643	lbfgs	500	10	identity
2	1	0.005659	0.660643	lbfgs	100	10	identity
3	4	0.005661	0.660641	lbfgs	250	(5, 5)	identity
4	4	0.005661	0.660641	lbfgs	100	(5, 5)	identity
5	4	0.005661	0.660641	lbfgs	500	(5, 5)	identity
6	7	0.005656	0.660641	lbfgs	500	5	relu
7	7	0.005656	0.660641	lbfgs	250	5	relu
8	7	0.005656	0.660641	lbfgs	100	5	relu
9	10	0.005661	0.660641	lbfgs	500	(5, 5)	relu
10	10	0.005661	0.660641	lbfgs	250	(5, 5)	relu
11	10	0.005661	0.660641	lbfgs	100	(5, 5)	relu
12	13	0.005662	0.660640	lbfgs	100	5	identity
13	13	0.005662	0.660640	lbfgs	500	5	identity
14	13	0.005662	0.660640	lbfgs	250	5	identity
15	16	0.004628	0.657280	lbfgs	500	5	tanh
16	16	0.004628	0.657280	lbfgs	250	5	tanh
17	18	0.004935	0.656713	lbfgs	100	5	tanh
18	19	0.009318	0.655847	lbfgs	250	10	tanh
19	19	0.009318	0.655847	lbfgs	500	10	tanh
20	21	0.009168	0.655273	lbfgs	100	10	tanh
21	22	0.006374	0.649767	adam	100	(5, 5)	identity
22	22	0.006374	0.649767	adam	250	(5, 5)	identity
23	22	0.006374	0.649767	adam	500	(5, 5)	identity
24	25	0.006701	0.649357	lbfgs	500	5	logistic

Tabela 88: Hiperparâmetros: teddy_data_mlp_1_x_1_g_err_g

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	25	0.006701	0.649357	lbfgs	100	5	logistic
26	25	0.006701	0.649357	lbfgs	250	5	logistic
27	28	0.014591	0.649096	lbfgs	250	(5, 5)	tanh
28	28	0.014591	0.649096	lbfgs	500	(5, 5)	tanh
29	30	0.005901	0.648368	sgd	250	(5, 5)	identity
30	30	0.005901	0.648368	sgd	100	(5, 5)	identity
31	30	0.005901	0.648368	sgd	500	(5, 5)	identity
32	33	0.013008	0.647688	lbfgs	100	(5, 5)	tanh
33	34	0.007674	0.645932	adam	500	10	tanh
34	34	0.007674	0.645932	adam	100	10	tanh
35	34	0.007674	0.645932	adam	250	10	tanh
36	37	0.005805	0.644877	lbfgs	100	10	logistic
37	37	0.005805	0.644877	lbfgs	500	10	logistic
38	37	0.005805	0.644877	lbfgs	250	10	logistic
39	40	0.005695	0.637008	adam	500	(5, 5)	tanh
40	40	0.005695	0.637008	adam	250	(5, 5)	tanh
41	40	0.005695	0.637008	adam	100	(5, 5)	tanh
42	43	0.006994	0.614954	adam	250	10	relu
43	43	0.006994	0.614954	adam	100	10	relu
44	43	0.006994	0.614954	adam	500	10	relu
45	46	0.002722	0.606326	adam	500	5	logistic
46	46	0.002722	0.606326	adam	250	5	logistic
47	46	0.002722	0.606326	adam	100	5	logistic
48	49	0.004734	0.603933	lbfgs	250	10	relu
49	49	0.004734	0.603933	lbfgs	500	10	relu

Tabela 89: Hiperparâmetros: teddy_data_mlp_1_x_1_g_err_g

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	49	0.004734	0.603933	lbfgs	100	10	relu
51	52	0.003918	0.597188	adam	100	5	tanh
52	52	0.003918	0.597188	adam	250	5	tanh
53	52	0.003918	0.597188	adam	500	5	tanh
54	55	0.008631	0.581491	sgd	100	5	relu
55	55	0.008631	0.581491	sgd	250	5	relu
56	55	0.008631	0.581491	sgd	500	5	relu
57	58	0.005626	0.570260	adam	100	10	logistic
58	58	0.005626	0.570260	adam	250	10	logistic
59	58	0.005626	0.570260	adam	500	10	logistic
60	61	0.079775	0.566484	adam	100	(5, 5)	relu
61	61	0.079775	0.566484	adam	250	(5, 5)	relu
62	61	0.079775	0.566484	adam	500	(5, 5)	relu
63	64	0.002917	0.460782	sgd	250	(5, 5)	relu
64	64	0.002917	0.460782	sgd	100	(5, 5)	relu
65	64	0.002917	0.460782	sgd	500	(5, 5)	relu
66	67	0.006227	0.445378	adam	500	(5, 5)	logistic
67	67	0.006227	0.445378	adam	100	(5, 5)	logistic
68	67	0.006227	0.445378	adam	250	(5, 5)	logistic
69	70	0.003340	0.410104	sgd	100	5	logistic
70	70	0.003340	0.410104	sgd	500	5	logistic
71	70	0.003340	0.410104	sgd	250	5	logistic
72	73	0.002704	0.368721	adam	500	5	relu
73	73	0.002704	0.368721	adam	100	5	relu
74	73	0.002704	0.368721	adam	250	5	relu

Tabela 90: Hiperparâmetros: teddy_data_mlp_1_x_1_g_err_g

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	76	0.007998	0.367027	sgd	100	5	identity
76	76	0.007998	0.367027	sgd	250	5	identity
77	76	0.007998	0.367027	sgd	500	5	identity
78	79	0.002769	0.313728	adam	100	5	identity
79	79	0.002769	0.313728	adam	250	5	identity
80	79	0.002769	0.313728	adam	500	5	identity
81	82	0.297531	0.292270	lbfgs	250	(5, 5)	logistic
82	82	0.297531	0.292270	lbfgs	500	(5, 5)	logistic
83	82	0.297531	0.292270	lbfgs	100	(5, 5)	logistic
84	85	0.002153	0.212611	sgd	100	5	tanh
85	85	0.002153	0.212611	sgd	250	5	tanh
86	85	0.002153	0.212611	sgd	500	5	tanh
87	88	0.002109	0.183244	sgd	250	10	tanh
88	88	0.002109	0.183244	sgd	100	10	tanh
89	88	0.002109	0.183244	sgd	500	10	tanh
90	91	0.001212	0.104106	sgd	500	10	logistic
91	91	0.001212	0.104106	sgd	250	10	logistic
92	91	0.001212	0.104106	sgd	100	10	logistic
93	94	0.000095	-0.000132	sgd	100	10	relu
94	94	0.000095	-0.000132	sgd	250	10	relu
95	94	0.000095	-0.000132	sgd	500	10	relu
96	97	0.000163	-0.015857	sgd	500	(5, 5)	logistic
97	97	0.000163	-0.015857	sgd	100	(5, 5)	logistic
98	97	0.000163	-0.015857	sgd	250	(5, 5)	logistic
99	100	0.000180	-0.020689	sgd	500	(5, 5)	tanh

Tabela 91: Hiperparâmetros: teddy_data_mlp_1_x_1_r_err_r

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.007598	0.390164	lbfgs	100	5	identity
1	1	0.007598	0.390164	lbfgs	250	5	identity
2	1	0.007598	0.390164	lbfgs	500	5	identity
3	4	0.007609	0.390158	lbfgs	100	5	relu
4	4	0.007609	0.390158	lbfgs	250	5	relu
5	4	0.007609	0.390158	lbfgs	500	5	relu
6	7	0.007602	0.390139	lbfgs	250	(5, 5)	relu
7	7	0.007602	0.390139	lbfgs	100	(5, 5)	relu
8	7	0.007602	0.390139	lbfgs	500	(5, 5)	relu
9	10	0.007586	0.390102	lbfgs	500	10	identity
10	10	0.007586	0.390102	lbfgs	100	10	identity
11	10	0.007586	0.390102	lbfgs	250	10	identity
12	13	0.008407	0.389604	lbfgs	500	(5, 5)	identity
13	13	0.008407	0.389604	lbfgs	250	(5, 5)	identity
14	13	0.008407	0.389604	lbfgs	100	(5, 5)	identity
15	16	0.007870	0.388646	adam	250	(5, 5)	relu
16	16	0.007870	0.388646	adam	100	(5, 5)	relu
17	16	0.007870	0.388646	adam	500	(5, 5)	relu
18	19	0.008147	0.378949	lbfgs	500	10	logistic
19	19	0.008147	0.378949	lbfgs	100	10	logistic
20	19	0.008147	0.378949	lbfgs	250	10	logistic
21	22	0.006328	0.377316	sgd	100	5	logistic
22	22	0.006328	0.377316	sgd	250	5	logistic
23	22	0.006328	0.377316	sgd	500	5	logistic
24	25	0.005741	0.376564	sgd	250	(5, 5)	relu

Tabela 92: Hiperparâmetros: teddy_data_mlp_1_x_1_r_err_r

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	25	0.005741	0.376564	sgd	100	(5, 5)	relu
26	25	0.005741	0.376564	sgd	500	(5, 5)	relu
27	28	0.006336	0.376482	lbfgs	100	5	logistic
28	28	0.006336	0.376482	lbfgs	250	5	logistic
29	28	0.006336	0.376482	lbfgs	500	5	logistic
30	31	0.007836	0.373795	lbfgs	500	5	tanh
31	31	0.007836	0.373795	lbfgs	250	5	tanh
32	31	0.007836	0.373795	lbfgs	100	5	tanh
33	34	0.013216	0.371953	adam	500	5	logistic
34	34	0.013216	0.371953	adam	100	5	logistic
35	34	0.013216	0.371953	adam	250	5	logistic
36	37	0.009124	0.367655	adam	500	10	logistic
37	37	0.009124	0.367655	adam	100	10	logistic
38	37	0.009124	0.367655	adam	250	10	logistic
39	40	0.011948	0.360098	adam	100	5	tanh
40	40	0.011948	0.360098	adam	250	5	tanh
41	40	0.011948	0.360098	adam	500	5	tanh
42	43	0.020226	0.359662	adam	100	(5, 5)	tanh
43	43	0.020226	0.359662	adam	250	(5, 5)	tanh
44	43	0.020226	0.359662	adam	500	(5, 5)	tanh
45	46	0.005376	0.356003	adam	250	5	relu
46	46	0.005376	0.356003	adam	500	5	relu
47	46	0.005376	0.356003	adam	100	5	relu
48	49	0.018954	0.340785	adam	100	10	tanh
49	49	0.018954	0.340785	adam	250	10	tanh

Tabela 93: Hiperparâmetros: teddy_data_mlp_1_x_1_r_err_r

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	49	0.018954	0.340785	adam	500	10	tanh
51	52	0.004600	0.320206	adam	100	5	identity
52	52	0.004600	0.320206	adam	250	5	identity
53	52	0.004600	0.320206	adam	500	5	identity
54	55	0.068675	0.291953	lbfgs	500	(5, 5)	tanh
55	55	0.068675	0.291953	lbfgs	100	(5, 5)	tanh
56	55	0.068675	0.291953	lbfgs	250	(5, 5)	tanh
57	58	0.051285	0.208412	lbfgs	500	10	tanh
58	58	0.051285	0.208412	lbfgs	100	10	tanh
59	58	0.051285	0.208412	lbfgs	250	10	tanh
60	61	0.017629	0.201893	lbfgs	100	10	relu
61	61	0.017629	0.201893	lbfgs	500	10	relu
62	61	0.017629	0.201893	lbfgs	250	10	relu
63	64	0.002535	0.197339	sgd	100	5	tanh
64	64	0.002535	0.197339	sgd	250	5	tanh
65	64	0.002535	0.197339	sgd	500	5	tanh
66	67	0.005118	0.196044	adam	500	(5, 5)	logistic
67	67	0.005118	0.196044	adam	250	(5, 5)	logistic
68	67	0.005118	0.196044	adam	100	(5, 5)	logistic
69	70	0.002198	0.170394	sgd	250	10	tanh
70	70	0.002198	0.170394	sgd	500	10	tanh
71	70	0.002198	0.170394	sgd	100	10	tanh
72	73	0.005783	0.147442	sgd	100	5	identity
73	73	0.005783	0.147442	sgd	250	5	identity
74	73	0.005783	0.147442	sgd	500	5	identity

Tabela 94: Hiperparâmetros: teddy_data_mlp_1_x_1_r_err_r

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	76	0.000139	-0.000141	sgd	100	10	relu
76	76	0.000139	-0.000141	sgd	500	10	relu
77	76	0.000139	-0.000141	sgd	250	10	relu
78	79	0.000275	-0.025207	sgd	500	(5, 5)	logistic
79	79	0.000275	-0.025207	sgd	250	(5, 5)	logistic
80	79	0.000275	-0.025207	sgd	100	(5, 5)	logistic
81	82	0.000286	-0.026455	lbfgs	250	(5, 5)	logistic
82	82	0.000286	-0.026455	lbfgs	500	(5, 5)	logistic
83	82	0.000286	-0.026455	lbfgs	100	(5, 5)	logistic
84	85	0.001164	-0.049391	sgd	250	10	logistic
85	85	0.001164	-0.049391	sgd	100	10	logistic
86	85	0.001164	-0.049391	sgd	500	10	logistic
87	88	0.000934	-0.076321	sgd	100	(5, 5)	tanh
88	88	0.000934	-0.076321	sgd	250	(5, 5)	tanh
89	88	0.000934	-0.076321	sgd	500	(5, 5)	tanh
90	91	0.029418	-0.138036	adam	250	(5, 5)	identity
91	91	0.029418	-0.138036	adam	500	(5, 5)	identity
92	91	0.029418	-0.138036	adam	100	(5, 5)	identity
93	94	0.039021	-0.276327	sgd	250	(5, 5)	identity
94	94	0.039021	-0.276327	sgd	100	(5, 5)	identity
95	94	0.039021	-0.276327	sgd	500	(5, 5)	identity
96	97	0.012446	-0.915341	adam	500	10	identity
97	97	0.012446	-0.915341	adam	250	10	identity
98	97	0.012446	-0.915341	adam	100	10	identity
99	100	0.054173	-1.105710	adam	100	10	relu

Tabela 95: Hiperparâmetros: teddy_data_mlp_1_x_1_i_err_i

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.009478	0.175449	lbfgs	500	(5, 5)	relu
1	1	0.009478	0.175449	lbfgs	100	(5, 5)	relu
2	1	0.009478	0.175449	lbfgs	250	(5, 5)	relu
3	4	0.009566	0.175410	lbfgs	100	5	identity
4	4	0.009566	0.175410	lbfgs	250	5	identity
5	4	0.009566	0.175410	lbfgs	500	5	identity
6	7	0.009577	0.175409	lbfgs	100	10	relu
7	7	0.009577	0.175409	lbfgs	250	10	relu
8	7	0.009577	0.175409	lbfgs	500	10	relu
9	10	0.009562	0.175406	lbfgs	500	10	identity
10	10	0.009562	0.175406	lbfgs	100	10	identity
11	10	0.009562	0.175406	lbfgs	250	10	identity
12	13	0.009590	0.175403	lbfgs	250	5	relu
13	13	0.009590	0.175403	lbfgs	100	5	relu
14	13	0.009590	0.175403	lbfgs	500	5	relu
15	16	0.009597	0.175399	lbfgs	500	(5, 5)	identity
16	16	0.009597	0.175399	lbfgs	100	(5, 5)	identity
17	16	0.009597	0.175399	lbfgs	250	(5, 5)	identity
18	19	0.008994	0.174125	adam	500	5	identity
19	19	0.008994	0.174125	adam	250	5	identity
20	19	0.008994	0.174125	adam	100	5	identity
21	22	0.010395	0.173009	adam	100	5	relu
22	22	0.010395	0.173009	adam	250	5	relu
23	22	0.010395	0.173009	adam	500	5	relu
24	25	0.009324	0.169665	lbfgs	250	10	logistic

Tabela 96: Hiperparâmetros: teddy_data_mlp_1_x_1_i_err_i

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	25	0.009324	0.169665	lbfgs	100	10	logistic
26	25	0.009324	0.169665	lbfgs	500	10	logistic
27	28	0.009441	0.165797	lbfgs	250	5	tanh
28	28	0.009441	0.165797	lbfgs	100	5	tanh
29	28	0.009441	0.165797	lbfgs	500	5	tanh
30	31	0.011100	0.165374	sgd	100	(5, 5)	relu
31	31	0.011100	0.165374	sgd	250	(5, 5)	relu
32	31	0.011100	0.165374	sgd	500	(5, 5)	relu
33	34	0.007084	0.163603	adam	100	10	logistic
34	34	0.007084	0.163603	adam	250	10	logistic
35	34	0.007084	0.163603	adam	500	10	logistic
36	37	0.009631	0.161589	adam	500	(5, 5)	tanh
37	37	0.009631	0.161589	adam	100	(5, 5)	tanh
38	37	0.009631	0.161589	adam	250	(5, 5)	tanh
39	40	0.012660	0.155153	sgd	250	5	logistic
40	40	0.012660	0.155153	sgd	100	5	logistic
41	40	0.012660	0.155153	sgd	500	5	logistic
42	43	0.012998	0.152793	lbfgs	100	5	logistic
43	43	0.012998	0.152793	lbfgs	500	5	logistic
44	43	0.012998	0.152793	lbfgs	250	5	logistic
45	46	0.016719	0.151487	adam	250	5	logistic
46	46	0.016719	0.151487	adam	100	5	logistic
47	46	0.016719	0.151487	adam	500	5	logistic
48	49	0.014388	0.143241	adam	500	5	tanh
49	49	0.014388	0.143241	adam	250	5	tanh

Tabela 97: Hiperparâmetros: teddy_data_mlp_1_x_1_i_err_i

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	49	0.014388	0.143241	adam	100	5	tanh
51	52	0.010248	0.139316	lbfgs	500	(5, 5)	tanh
52	52	0.010248	0.139316	lbfgs	250	(5, 5)	tanh
53	52	0.010248	0.139316	lbfgs	100	(5, 5)	tanh
54	55	0.031491	0.130877	adam	100	(5, 5)	relu
55	55	0.031491	0.130877	adam	250	(5, 5)	relu
56	55	0.031491	0.130877	adam	500	(5, 5)	relu
57	58	0.013343	0.122505	adam	250	10	tanh
58	58	0.013343	0.122505	adam	500	10	tanh
59	58	0.013343	0.122505	adam	100	10	tanh
60	61	0.004190	0.117215	sgd	500	5	tanh
61	61	0.004190	0.117215	sgd	100	5	tanh
62	61	0.004190	0.117215	sgd	250	5	tanh
63	64	0.003708	0.112223	lbfgs	100	10	tanh
64	64	0.003708	0.112223	lbfgs	250	10	tanh
65	64	0.003708	0.112223	lbfgs	500	10	tanh
66	67	0.003373	0.101710	sgd	100	10	tanh
67	67	0.003373	0.101710	sgd	250	10	tanh
68	67	0.003373	0.101710	sgd	500	10	tanh
69	70	0.004243	0.074828	adam	100	(5, 5)	logistic
70	70	0.004243	0.074828	adam	250	(5, 5)	logistic
71	70	0.004243	0.074828	adam	500	(5, 5)	logistic
72	73	0.003475	0.042177	sgd	500	5	identity
73	73	0.003475	0.042177	sgd	100	5	identity
74	73	0.003475	0.042177	sgd	250	5	identity

Tabela 98: Hiperparâmetros: teddy_data_mlp_1_x_1_i_err_i

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	76	0.029384	0.011316	sgd	100	10	identity
76	76	0.029384	0.011316	sgd	250	10	identity
77	76	0.029384	0.011316	sgd	500	10	identity
78	79	0.000217	-0.000186	sgd	500	10	relu
79	79	0.000217	-0.000186	sgd	250	10	relu
80	79	0.000217	-0.000186	sgd	100	10	relu
81	82	0.000373	-0.017215	sgd	500	(5, 5)	logistic
82	82	0.000373	-0.017215	sgd	250	(5, 5)	logistic
83	82	0.000373	-0.017215	sgd	100	(5, 5)	logistic
84	85	0.000387	-0.017791	lbfgs	500	(5, 5)	logistic
85	85	0.000387	-0.017791	lbfgs	250	(5, 5)	logistic
86	85	0.000387	-0.017791	lbfgs	100	(5, 5)	logistic
87	88	0.002083	-0.061574	sgd	250	10	logistic
88	88	0.002083	-0.061574	sgd	100	10	logistic
89	88	0.002083	-0.061574	sgd	500	10	logistic
90	91	0.001923	-0.073353	sgd	500	(5, 5)	tanh
91	91	0.001923	-0.073353	sgd	100	(5, 5)	tanh
92	91	0.001923	-0.073353	sgd	250	(5, 5)	tanh
93	94	0.013867	-0.683683	adam	500	10	identity
94	94	0.013867	-0.683683	adam	250	10	identity
95	94	0.013867	-0.683683	adam	100	10	identity
96	97	0.044393	-0.706001	adam	500	(5, 5)	identity
97	97	0.044393	-0.706001	adam	100	(5, 5)	identity
98	97	0.044393	-0.706001	adam	250	(5, 5)	identity
99	100	0.055319	-0.932485	sgd	100	(5, 5)	identity

Tabela 99: Hiperparâmetros: teddy_data_mlp_1_x_1_z_err_z

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.004325	0.076665	lbfgs	500	10	identity
1	1	0.004325	0.076665	lbfgs	100	10	identity
2	1	0.004325	0.076665	lbfgs	250	10	identity
3	4	0.004309	0.076644	lbfgs	500	(5, 5)	identity
4	4	0.004309	0.076644	lbfgs	250	(5, 5)	identity
5	4	0.004309	0.076644	lbfgs	100	(5, 5)	identity
6	7	0.004301	0.076644	lbfgs	100	5	identity
7	7	0.004301	0.076644	lbfgs	250	5	identity
8	7	0.004301	0.076644	lbfgs	500	5	identity
9	10	0.004315	0.076642	lbfgs	250	10	relu
10	10	0.004315	0.076642	lbfgs	500	10	relu
11	10	0.004315	0.076642	lbfgs	100	10	relu
12	13	0.004331	0.076610	lbfgs	250	5	relu
13	13	0.004331	0.076610	lbfgs	100	5	relu
14	13	0.004331	0.076610	lbfgs	500	5	relu
15	16	0.004393	0.076574	lbfgs	500	(5, 5)	relu
16	16	0.004393	0.076574	lbfgs	250	(5, 5)	relu
17	16	0.004393	0.076574	lbfgs	100	(5, 5)	relu
18	19	0.004825	0.076155	adam	250	5	identity
19	19	0.004825	0.076155	adam	100	5	identity
20	19	0.004825	0.076155	adam	500	5	identity
21	22	0.005142	0.073441	adam	500	5	relu
22	22	0.005142	0.073441	adam	250	5	relu
23	22	0.005142	0.073441	adam	100	5	relu
24	25	0.004315	0.072210	lbfgs	250	10	logistic

Tabela 100: Hiperparâmetros: teddy_data_mlp_1_x_1_z_err_z

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	25	0.004315	0.072210	lbfgs	100	10	logistic
26	25	0.004315	0.072210	lbfgs	500	10	logistic
27	28	0.005714	0.068948	sgd	500	(5, 5)	relu
28	28	0.005714	0.068948	sgd	250	(5, 5)	relu
29	28	0.005714	0.068948	sgd	100	(5, 5)	relu
30	31	0.003973	0.068007	lbfgs	100	5	tanh
31	31	0.003973	0.068007	lbfgs	250	5	tanh
32	31	0.003973	0.068007	lbfgs	500	5	tanh
33	34	0.002793	0.067924	adam	500	10	logistic
34	34	0.002793	0.067924	adam	250	10	logistic
35	34	0.002793	0.067924	adam	100	10	logistic
36	37	0.005676	0.066743	sgd	250	5	logistic
37	37	0.005676	0.066743	sgd	100	5	logistic
38	37	0.005676	0.066743	sgd	500	5	logistic
39	40	0.005880	0.066109	lbfgs	100	5	logistic
40	40	0.005880	0.066109	lbfgs	500	5	logistic
41	40	0.005880	0.066109	lbfgs	250	5	logistic
42	43	0.004098	0.062403	adam	100	(5, 5)	tanh
43	43	0.004098	0.062403	adam	500	(5, 5)	tanh
44	43	0.004098	0.062403	adam	250	(5, 5)	tanh
45	46	0.006338	0.060956	lbfgs	250	(5, 5)	tanh
46	46	0.006338	0.060956	lbfgs	500	(5, 5)	tanh
47	46	0.006338	0.060956	lbfgs	100	(5, 5)	tanh
48	49	0.008459	0.053782	adam	500	5	tanh
49	49	0.008459	0.053782	adam	250	5	tanh

Tabela 101: Hiperparâmetros: teddy_data_mlp_1_x_1_z_err_z

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	49	0.008459	0.053782	adam	100	5	tanh
51	52	0.005365	0.049035	adam	500	10	tanh
52	52	0.005365	0.049035	adam	250	10	tanh
53	52	0.005365	0.049035	adam	100	10	tanh
54	55	0.006173	0.046833	adam	100	(5, 5)	relu
55	55	0.006173	0.046833	adam	250	(5, 5)	relu
56	55	0.006173	0.046833	adam	500	(5, 5)	relu
57	58	0.001380	0.046795	lbfgs	100	10	tanh
58	58	0.001380	0.046795	lbfgs	250	10	tanh
59	58	0.001380	0.046795	lbfgs	500	10	tanh
60	61	0.001704	0.045003	sgd	250	5	tanh
61	61	0.001704	0.045003	sgd	500	5	tanh
62	61	0.001704	0.045003	sgd	100	5	tanh
63	64	0.016885	0.043318	adam	250	5	logistic
64	64	0.016885	0.043318	adam	500	5	logistic
65	64	0.016885	0.043318	adam	100	5	logistic
66	67	0.001257	0.040735	sgd	100	10	tanh
67	67	0.001257	0.040735	sgd	250	10	tanh
68	67	0.001257	0.040735	sgd	500	10	tanh
69	70	0.009406	0.036884	sgd	250	10	identity
70	70	0.009406	0.036884	sgd	100	10	identity
71	70	0.009406	0.036884	sgd	500	10	identity
72	73	0.004370	0.026719	sgd	100	5	identity
73	73	0.004370	0.026719	sgd	250	5	identity
74	73	0.004370	0.026719	sgd	500	5	identity

Tabela 102: Hiperparâmetros: teddy_data_mlp_1_x_1_z_err_z

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	76	0.003530	0.023455	adam	500	(5, 5)	logistic
76	76	0.003530	0.023455	adam	250	(5, 5)	logistic
77	76	0.003530	0.023455	adam	100	(5, 5)	logistic
78	79	0.000274	-0.000171	sgd	100	10	relu
79	79	0.000274	-0.000171	sgd	500	10	relu
80	79	0.000274	-0.000171	sgd	250	10	relu
81	82	0.000217	-0.006253	sgd	500	(5, 5)	logistic
82	82	0.000217	-0.006253	sgd	250	(5, 5)	logistic
83	82	0.000217	-0.006253	sgd	100	(5, 5)	logistic
84	85	0.000247	-0.006529	lbfgs	500	(5, 5)	logistic
85	85	0.000247	-0.006529	lbfgs	250	(5, 5)	logistic
86	85	0.000247	-0.006529	lbfgs	100	(5, 5)	logistic
87	88	0.000802	-0.011364	sgd	100	10	logistic
88	88	0.000802	-0.011364	sgd	500	10	logistic
89	88	0.000802	-0.011364	sgd	250	10	logistic
90	91	0.000981	-0.031963	sgd	250	(5, 5)	tanh
91	91	0.000981	-0.031963	sgd	500	(5, 5)	tanh
92	91	0.000981	-0.031963	sgd	100	(5, 5)	tanh
93	94	0.003530	-0.210991	adam	500	10	identity
94	94	0.003530	-0.210991	adam	250	10	identity
95	94	0.003530	-0.210991	adam	100	10	identity
96	97	0.018773	-0.270963	adam	500	(5, 5)	identity
97	97	0.018773	-0.270963	adam	250	(5, 5)	identity
98	97	0.018773	-0.270963	adam	100	(5, 5)	identity
99	100	0.019260	-0.370080	sgd	100	(5, 5)	identity

Tabela 103: Hiperparâmetros: teddy_data_rf_1_x_1_u_err_u

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.009145	0.595983	absolute_error
2	0.009483	0.590144	squared_error
2	0.009483	0.590144	poisson

Tabela 104: Hiperparâmetros: teddy_data_rf_1_x_1_g_err_g

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.008153	0.610837	absolute_error
2	0.008633	0.605207	squared_error
3	0.008633	0.605207	poisson

Tabela 105: Hiperparâmetros: teddy_data_rf_1_x_1_r_err_r

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.014875	0.236015	absolute_error
2	0.015014	0.224667	poisson
3	0.015014	0.224667	squared_error

Tabela 106: Hiperparâmetros: teddy_data_rf_1_x_1_i_err_i

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.016921	-0.116788	absolute_error
2	0.017793	-0.133615	squared_error
2	0.017793	-0.133615	poisson

Tabela 107: Hiperparâmetros: teddy_data_rf_1_x_1_z_err_z

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.010580	-0.176366	absolute_error
2	0.010611	-0.193137	squared_error
2	0.010611	-0.193137	poisson

Tabela 108: Hiperparâmetros: teddy_data_xgb_1_x_1_u_err_u

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.003087	0.714096	reg:squarederror	1
2	0.003625	0.711947	reg:squarederror	5
3	0.005131	0.696513	reg:squarederror	10

Tabela 109: Hiperparâmetros: teddy_data_xgb_1_x_1_g_err_g

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.005628	0.724492	reg:squarederror	1
2	0.004442	0.721369	reg:squarederror	5
3	0.004824	0.711150	reg:squarederror	10

Tabela 110: Hiperparâmetros: teddy_data_xgb_1_x_1_r_err_r

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.006605	0.459411	reg:squarederror	1
2	0.006637	0.452459	reg:squarederror	5
3	0.006913	0.434592	reg:squarederror	10

Tabela 111: Hiperparâmetros: teddy_data_xgb_1_x_1_i_err_i

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.008637	0.227635	reg:squarederror	1
2	0.007214	0.214822	reg:squarederror	5
3	0.004185	0.186097	reg:squarederror	10

Tabela 112: Hiperparâmetros: teddy_data_xgb_1_x_1_z_err_z

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.003115	0.184022	reg:squarederror	1
2	0.003331	0.172490	reg:squarederror	5
3	0.004712	0.146132	reg:squarederror	10

Tabela 113: Hiperparâmetros: happy_data_dt_m_x_m

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.122050	0.441323	best	10	absolute_error
2	0.252982	0.405513	random	10	friedman_mse
3	0.116438	0.393765	best	15	absolute_error
4	0.361557	0.387029	best	15	squared_error
5	0.348931	0.372033	best	10	squared_error
6	0.248436	0.369091	random	15	friedman_mse
7	0.286481	0.367592	best	15	friedman_mse
8	0.287624	0.356205	random	10	poisson
9	0.303742	0.342690	best	10	friedman_mse
10	0.302413	0.279562	random	10	squared_error
11	0.156670	0.275403	best	5	poisson
12	0.119279	0.227093	best	5	absolute_error
13	0.381424	0.215826	random	15	poisson
14	0.258992	0.207789	best	5	friedman_mse
15	0.220386	0.194485	best	5	squared_error
16	0.186075	0.192341	random	5	absolute_error
17	0.227190	0.171935	random	5	friedman_mse
18	0.234042	0.169713	random	5	squared_error
19	0.184283	0.135332	random	10	absolute_error
20	0.323426	0.135035	random	15	squared_error
21	0.348331	0.101541	best	10	poisson
22	0.197813	0.079757	random	15	absolute_error
23	0.278864	0.078604	best	15	poisson
24	0.376693	0.058577	random	5	poisson

Tabela 114: Hiperparâmetros: happy_data_knn_m_x_m

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.133418	0.616855	distance	2	4	brute
1	2	0.133418	0.616855	distance	2	4	ball_tree
2	2	0.133418	0.616855	distance	2	4	kd_tree
3	4	0.128887	0.614415	distance	3	4	ball_tree
4	4	0.128887	0.614415	distance	3	4	brute
5	4	0.128887	0.614415	distance	3	4	kd_tree
6	7	0.111729	0.611377	distance	1	5	kd_tree
7	7	0.111729	0.611377	distance	1	5	ball_tree
8	7	0.111729	0.611377	distance	1	5	brute
9	10	0.112643	0.610614	distance	1	4	brute
10	10	0.112643	0.610614	distance	1	4	kd_tree
11	12	0.112643	0.610614	distance	1	4	ball_tree
12	13	0.124709	0.610584	distance	2	5	brute
13	14	0.124709	0.610584	distance	2	5	ball_tree
14	14	0.124709	0.610584	distance	2	5	kd_tree
15	16	0.119168	0.609525	distance	3	5	brute
16	16	0.119168	0.609525	distance	3	5	kd_tree
17	16	0.119168	0.609525	distance	3	5	ball_tree
18	19	0.107226	0.608720	distance	1	6	ball_tree
19	19	0.107226	0.608720	distance	1	6	brute
20	19	0.107226	0.608720	distance	1	6	kd_tree
21	22	0.116029	0.604534	distance	2	6	brute
22	23	0.116029	0.604534	distance	2	6	ball_tree
23	23	0.116029	0.604534	distance	2	6	kd_tree
24	25	0.115498	0.600485	distance	3	6	brute

Tabela 115: Hiperparâmetros: happy_data_knn_m_x_m

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	25	0.115498	0.600485	distance	3	6	ball_tree
26	25	0.115498	0.600485	distance	3	6	kd_tree
27	28	0.128199	0.591765	uniform	2	4	kd_tree
28	28	0.128199	0.591765	uniform	2	4	brute
29	28	0.128199	0.591765	uniform	2	4	ball_tree
30	31	0.121208	0.587236	uniform	3	4	kd_tree
31	31	0.121208	0.587236	uniform	3	4	ball_tree
32	31	0.121208	0.587236	uniform	3	4	brute
33	34	0.102369	0.583460	uniform	1	4	kd_tree
34	34	0.102369	0.583460	uniform	1	4	brute
35	36	0.102369	0.583460	uniform	1	4	ball_tree
36	37	0.102059	0.581001	uniform	1	5	ball_tree
37	37	0.102059	0.581001	uniform	1	5	brute
38	37	0.102059	0.581001	uniform	1	5	kd_tree
39	40	0.116675	0.577737	uniform	2	5	brute
40	40	0.116675	0.577737	uniform	2	5	ball_tree
41	40	0.116675	0.577737	uniform	2	5	kd_tree
42	43	0.109528	0.575963	uniform	3	5	brute
43	43	0.109528	0.575963	uniform	3	5	ball_tree
44	43	0.109528	0.575963	uniform	3	5	kd_tree
45	46	0.097321	0.575402	uniform	1	6	ball_tree
46	46	0.097321	0.575402	uniform	1	6	brute
47	46	0.097321	0.575402	uniform	1	6	kd_tree
48	49	0.105852	0.567694	uniform	2	6	ball_tree
49	49	0.105852	0.567694	uniform	2	6	brute

Tabela 116: Hiperparâmetros: happy_data_mlp_m_x_m

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.041646	0.295620	lbfgs	500	10	relu
1	2	0.047512	0.284599	lbfgs	500	5	relu
2	3	0.040187	0.281446	adam	500	10	tanh
3	3	0.040187	0.281446	adam	100	10	tanh
4	3	0.040187	0.281446	adam	250	10	tanh
5	6	0.034863	0.267517	lbfgs	500	10	logistic
6	7	0.062534	0.255486	lbfgs	500	10	identity
7	8	0.047301	0.250361	lbfgs	500	5	identity
8	9	0.041471	0.234257	adam	100	5	logistic
9	9	0.041471	0.234257	adam	500	5	logistic
10	9	0.041471	0.234257	adam	250	5	logistic
11	12	0.038244	0.231195	adam	100	10	logistic
12	12	0.038244	0.231195	adam	250	10	logistic
13	12	0.038244	0.231195	adam	500	10	logistic
14	15	0.052897	0.226415	lbfgs	250	5	identity
15	16	0.033732	0.221283	lbfgs	250	10	logistic
16	17	0.051729	0.216195	lbfgs	250	5	relu
17	18	0.040300	0.214311	lbfgs	500	(5, 5)	identity
18	19	0.062256	0.191794	lbfgs	250	10	relu
19	20	0.042123	0.189703	adam	500	(5, 5)	tanh
20	20	0.042123	0.189703	adam	250	(5, 5)	tanh
21	20	0.042123	0.189703	adam	100	(5, 5)	tanh
22	23	0.030828	0.189269	adam	100	(5, 5)	logistic
23	23	0.030828	0.189269	adam	500	(5, 5)	logistic
24	23	0.030828	0.189269	adam	250	(5, 5)	logistic

Tabela 117: Hiperparâmetros: happy_data_mlp_m_x_m

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	26	0.025661	0.176394	adam	250	5	tanh
26	26	0.025661	0.176394	adam	500	5	tanh
27	26	0.025661	0.176394	adam	100	5	tanh
28	29	0.042832	0.168412	lbfgs	100	5	relu
29	30	0.089261	0.151270	adam	250	10	relu
30	30	0.089261	0.151270	adam	100	10	relu
31	30	0.089261	0.151270	adam	500	10	relu
32	33	0.093581	0.150094	lbfgs	250	10	identity
33	34	0.074560	0.145434	lbfgs	100	5	identity
34	35	0.056087	0.133998	lbfgs	250	(5, 5)	identity
35	36	0.015542	0.127383	sgd	500	5	logistic
36	36	0.015542	0.127383	sgd	250	5	logistic
37	36	0.015542	0.127383	sgd	100	5	logistic
38	39	0.103978	0.119912	adam	100	10	identity
39	39	0.103978	0.119912	adam	250	10	identity
40	39	0.103978	0.119912	adam	500	10	identity
41	42	0.020254	0.119035	sgd	100	10	logistic
42	42	0.020254	0.119035	sgd	250	10	logistic
43	42	0.020254	0.119035	sgd	500	10	logistic
44	45	0.035793	0.106353	lbfgs	100	10	logistic
45	46	0.056520	0.085030	adam	250	(5, 5)	identity
46	46	0.056520	0.085030	adam	100	(5, 5)	identity
47	46	0.056520	0.085030	adam	500	(5, 5)	identity
48	49	0.113391	0.061100	adam	500	5	relu
49	49	0.113391	0.061100	adam	250	5	relu

Tabela 118: Hiperparâmetros: happy_data_mlp_m_x_m

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	51	0.105741	0.051632	adam	100	5	relu
51	52	0.056878	0.028146	lbfgs	250	10	tanh
52	52	0.056878	0.028146	lbfgs	500	10	tanh
53	54	0.049383	0.024398	lbfgs	100	10	tanh
54	55	0.115648	0.012893	adam	500	5	identity
55	55	0.115648	0.012893	adam	250	5	identity
56	55	0.115648	0.012893	adam	100	5	identity
57	58	0.000217	-0.000133	sgd	250	(5, 5)	logistic
58	58	0.000217	-0.000133	sgd	500	(5, 5)	logistic
59	58	0.000217	-0.000133	sgd	100	(5, 5)	logistic
60	61	0.000199	-0.000233	sgd	100	5	relu
61	61	0.000199	-0.000233	sgd	500	5	relu
62	61	0.000199	-0.000233	sgd	250	5	relu
63	64	0.000203	-0.000248	lbfgs	100	5	logistic
64	64	0.000203	-0.000248	lbfgs	250	5	logistic
65	64	0.000203	-0.000248	lbfgs	500	5	logistic
66	67	0.000198	-0.000256	sgd	250	10	relu
67	67	0.000198	-0.000256	sgd	100	10	relu
68	67	0.000198	-0.000256	sgd	500	10	relu
69	70	0.000206	-0.000262	lbfgs	250	(5, 5)	logistic
70	70	0.000206	-0.000262	lbfgs	500	(5, 5)	logistic
71	70	0.000206	-0.000262	lbfgs	100	(5, 5)	logistic
72	73	0.000208	-0.000265	lbfgs	250	(5, 5)	relu
73	73	0.000208	-0.000265	lbfgs	500	(5, 5)	relu
74	73	0.000208	-0.000265	lbfgs	100	(5, 5)	relu

Tabela 119: Hiperparâmetros: happy_data_mlp_m_x_m

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	76	0.000210	-0.000266	lbfgs	100	(5, 5)	tanh
76	76	0.000210	-0.000266	lbfgs	250	(5, 5)	tanh
77	76	0.000210	-0.000266	lbfgs	500	(5, 5)	tanh
78	79	0.000210	-0.000267	lbfgs	250	5	tanh
79	79	0.000210	-0.000267	lbfgs	100	5	tanh
80	79	0.000210	-0.000267	lbfgs	500	5	tanh
81	82	0.000178	-0.000312	sgd	100	(5, 5)	tanh
82	82	0.000178	-0.000312	sgd	250	(5, 5)	tanh
83	82	0.000178	-0.000312	sgd	500	(5, 5)	tanh
84	85	0.000315	-0.000316	adam	100	(5, 5)	relu
85	85	0.000315	-0.000316	adam	250	(5, 5)	relu
86	85	0.000315	-0.000316	adam	500	(5, 5)	relu
87	88	0.000201	-0.000505	sgd	500	5	tanh
88	88	0.000201	-0.000505	sgd	100	5	tanh
89	88	0.000201	-0.000505	sgd	250	5	tanh
90	91	0.000842	-0.000588	sgd	250	(5, 5)	relu
91	91	0.000842	-0.000588	sgd	500	(5, 5)	relu
92	91	0.000842	-0.000588	sgd	100	(5, 5)	relu
93	94	0.001769	-0.002285	sgd	100	10	tanh
94	94	0.001769	-0.002285	sgd	500	10	tanh
95	94	0.001769	-0.002285	sgd	250	10	tanh
96	97	0.183949	-0.098086	lbfgs	100	10	relu
97	98	0.192512	-0.184406	lbfgs	100	10	identity
98	99	0.257046	-0.391343	lbfgs	100	(5, 5)	identity
99	100	NaN	NaN	sgd	250	5	identity

Tabela 120: Hiperparâmetros: happy_data_rf_m_x_m

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.081116	0.626647	poisson
2	0.089521	0.599214	absolute_error
3	0.117792	0.597607	squared_error

Tabela 121: Hiperparâmetros: happy_data_xgb_m_x_m

rank_test_score	std_test_score	mean_test_score	param_estimator__objective	param_estimator__max_depth
1	0.197054	0.535561	reg:squarederror	5
2	0.220980	0.505310	reg:squarederror	10
3	0.150713	0.479406	reg:squarederror	1

Tabela 122: Hiperparâmetros: happy_data_dt_m_x_1_err_u

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.006631	0.813126	best	10	squared_error
2	0.006476	0.813005	best	10	friedman_mse
3	0.010860	0.809842	best	10	poisson
4	0.004468	0.806066	best	10	absolute_error
5	0.014195	0.799895	random	10	friedman_mse
6	0.014170	0.799880	random	10	squared_error
7	0.008084	0.799188	random	10	absolute_error
8	0.012749	0.797615	random	10	poisson
9	0.007371	0.794999	random	15	absolute_error
10	0.006729	0.791775	random	15	squared_error
11	0.004626	0.789221	best	5	squared_error
11	0.004626	0.789221	best	5	friedman_mse
13	0.003660	0.788171	random	15	friedman_mse
14	0.003556	0.785698	random	15	poisson
15	0.009960	0.784674	best	15	friedman_mse
16	0.009934	0.783958	best	15	squared_error
17	0.007412	0.781545	best	5	poisson
18	0.006501	0.780483	best	15	absolute_error
19	0.011356	0.779834	best	15	poisson
20	0.006772	0.774945	best	5	absolute_error
21	0.038781	0.632601	random	5	friedman_mse
22	0.040354	0.630765	random	5	squared_error
23	0.007254	0.593002	random	5	poisson
24	0.009041	0.581172	random	5	absolute_error

Tabela 123: Hiperparâmetros: happy_data_dt_m_x_1_err_g

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.274033	0.510643	random	10	absolute_error
2	0.229212	0.478043	random	15	absolute_error
3	0.197992	0.393379	random	5	absolute_error
4	1.053392	0.001364	best	5	absolute_error
5	1.062571	-0.013703	best	5	poisson
6	1.031832	-0.017141	best	5	squared_error
6	1.031832	-0.017141	best	5	friedman_mse
8	1.178685	-0.018359	best	10	squared_error
9	1.178019	-0.020223	best	10	friedman_mse
10	1.169567	-0.031812	best	10	poisson
11	1.173036	-0.033977	best	15	squared_error
12	1.171054	-0.037929	best	15	friedman_mse
13	1.124838	-0.039414	random	10	poisson
14	1.174850	-0.045614	best	10	absolute_error
15	1.281697	-0.070948	random	15	poisson
16	0.981176	-0.073795	best	15	poisson
17	0.955428	-0.089871	random	5	poisson
18	0.996533	-0.145968	random	15	friedman_mse
19	1.120186	-0.146812	best	15	absolute_error
20	0.981353	-0.147290	random	5	friedman_mse
20	0.981353	-0.147290	random	5	squared_error
22	1.030279	-0.164863	random	15	squared_error
23	1.472733	-0.170936	random	10	squared_error
24	1.473563	-0.170954	random	10	friedman_mse

Tabela 124: Hiperparâmetros: happy_data_dt_m_x_1_err_r

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.199669	0.615274	best	15	absolute_error
2	0.266750	0.588054	random	10	absolute_error
3	0.226885	0.586674	best	5	absolute_error
4	0.228539	0.548511	best	5	poisson
5	0.207464	0.543806	best	10	friedman_mse
6	0.262097	0.533577	best	10	absolute_error
7	0.263630	0.520478	best	15	poisson
8	0.238860	0.518762	random	15	poisson
9	0.257771	0.508304	best	10	poisson
10	0.098589	0.508206	random	5	poisson
11	0.192572	0.503949	best	5	friedman_mse
12	0.219067	0.491830	best	10	squared_error
13	0.184758	0.480125	best	5	squared_error
14	0.411408	0.478684	random	15	absolute_error
15	0.224864	0.459397	best	15	friedman_mse
16	0.227117	0.459310	best	15	squared_error
17	0.252293	0.407592	random	10	poisson
18	0.467042	0.390344	random	10	friedman_mse
19	0.467073	0.390295	random	10	squared_error
20	0.475034	0.346517	random	5	absolute_error
21	0.513967	0.268025	random	15	squared_error
22	0.507890	0.260842	random	15	friedman_mse
23	0.211605	0.197972	random	5	friedman_mse
23	0.211605	0.197972	random	5	squared_error

Tabela 125: Hiperparâmetros: happy_data_dt_m_x_1_err_i

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.443997	0.362931	best	15	poisson
2	0.486431	0.359584	best	10	poisson
3	0.504225	0.319029	best	5	poisson
4	0.196646	0.246200	random	10	friedman_mse
5	0.173302	0.223426	random	10	squared_error
6	0.435006	0.193751	best	15	friedman_mse
7	0.436074	0.192444	best	15	squared_error
8	0.489225	0.185279	random	15	friedman_mse
9	0.495737	0.180923	random	15	squared_error
10	0.470999	0.174731	best	10	squared_error
11	0.526906	0.173928	best	5	squared_error
11	0.526906	0.173928	best	5	friedman_mse
13	0.525447	0.136177	random	15	poisson
14	0.529865	0.132432	best	10	friedman_mse
15	0.640156	0.033468	random	10	poisson
16	0.219995	-0.015874	random	10	absolute_error
17	0.637345	-0.044985	random	15	absolute_error
18	0.441793	-0.076416	random	5	friedman_mse
19	1.153588	-0.399204	random	5	absolute_error
20	2.267344	-0.940696	random	5	poisson
21	2.253599	-1.005900	random	5	squared_error
22	3.074732	-1.203230	best	10	absolute_error
23	3.083758	-1.206255	best	15	absolute_error
24	3.086580	-1.209865	best	5	absolute_error

Tabela 126: Hiperparâmetros: happy_data_dt_m_x_1_err_z

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.027837	0.538579	random	10	squared_error
2	0.191399	0.537879	random	15	absolute_error
3	0.118035	0.516746	best	5	poisson
4	0.107603	0.515311	random	10	absolute_error
5	0.165438	0.498372	best	15	absolute_error
6	0.103638	0.495757	best	15	poisson
7	0.121817	0.493845	random	10	friedman_mse
8	0.143715	0.488097	random	15	poisson
9	0.116503	0.486264	best	10	absolute_error
10	0.101659	0.484807	best	15	friedman_mse
11	0.099795	0.482844	best	15	squared_error
12	0.107361	0.481654	best	10	friedman_mse
13	0.107193	0.481564	best	10	squared_error
14	0.122570	0.476795	best	5	friedman_mse
15	0.121389	0.472837	best	5	squared_error
16	0.116058	0.470035	best	10	poisson
17	0.163171	0.456099	random	5	friedman_mse
17	0.163171	0.456099	random	5	squared_error
19	0.156868	0.444527	best	5	absolute_error
20	0.113473	0.429487	random	15	friedman_mse
21	0.112042	0.429375	random	15	squared_error
22	0.235592	0.394547	random	10	poisson
23	0.430669	0.277808	random	5	poisson
24	0.201169	0.196143	random	5	absolute_error

Tabela 127: Hiperparâmetros: happy_data_knn_m_x_1_err_u

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.003962	0.820577	uniform	1	6	brute
1	1	0.003962	0.820577	uniform	1	6	kd_tree
2	1	0.003962	0.820577	uniform	1	6	ball_tree
3	4	0.004426	0.820225	uniform	2	6	brute
4	4	0.004426	0.820225	uniform	2	6	kd_tree
5	4	0.004426	0.820225	uniform	2	6	ball_tree
6	7	0.004027	0.820096	uniform	3	6	brute
7	7	0.004027	0.820096	uniform	3	6	kd_tree
8	7	0.004027	0.820096	uniform	3	6	ball_tree
9	10	0.004581	0.819897	distance	1	6	brute
10	10	0.004581	0.819897	distance	1	6	kd_tree
11	10	0.004581	0.819897	distance	1	6	ball_tree
12	13	0.004581	0.819238	distance	2	6	brute
13	14	0.004581	0.819238	distance	2	6	kd_tree
14	14	0.004581	0.819238	distance	2	6	ball_tree
15	16	0.004334	0.819161	distance	3	6	ball_tree
16	16	0.004334	0.819161	distance	3	6	brute
17	16	0.004334	0.819161	distance	3	6	kd_tree
18	19	0.005128	0.816397	uniform	3	5	brute
19	19	0.005128	0.816397	uniform	3	5	kd_tree
20	19	0.005128	0.816397	uniform	3	5	ball_tree
21	22	0.004967	0.816233	uniform	2	5	brute
22	22	0.004967	0.816233	uniform	2	5	kd_tree
23	22	0.004967	0.816233	uniform	2	5	ball_tree
24	25	0.004653	0.815945	uniform	1	5	brute

Tabela 128: Hiperparâmetros: happy_data_knn_m_x_1_err_u

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	25	0.004653	0.815945	uniform	1	5	kd_tree
26	25	0.004653	0.815945	uniform	1	5	ball_tree
27	28	0.005062	0.815242	distance	1	5	kd_tree
28	28	0.005062	0.815242	distance	1	5	ball_tree
29	28	0.005062	0.815242	distance	1	5	brute
30	31	0.005209	0.815129	distance	3	5	ball_tree
31	31	0.005209	0.815129	distance	3	5	kd_tree
32	31	0.005209	0.815129	distance	3	5	brute
33	34	0.004902	0.815064	distance	2	5	brute
34	35	0.004902	0.815064	distance	2	5	ball_tree
35	35	0.004902	0.815064	distance	2	5	kd_tree
36	37	0.006064	0.810013	uniform	3	4	ball_tree
37	37	0.006064	0.810013	uniform	3	4	kd_tree
38	37	0.006064	0.810013	uniform	3	4	brute
39	40	0.005125	0.809388	uniform	1	4	ball_tree
40	41	0.005125	0.809388	uniform	1	4	kd_tree
41	41	0.005125	0.809388	uniform	1	4	brute
42	43	0.005022	0.809137	uniform	2	4	ball_tree
43	43	0.005022	0.809137	uniform	2	4	brute
44	43	0.005022	0.809137	uniform	2	4	kd_tree
45	46	0.005844	0.808627	distance	3	4	ball_tree
46	46	0.005844	0.808627	distance	3	4	brute
47	46	0.005844	0.808627	distance	3	4	kd_tree
48	49	0.005541	0.808613	distance	1	4	ball_tree
49	50	0.005541	0.808613	distance	1	4	brute

Tabela 129: Hiperparâmetros: happy_data_knn_m_x_1_err_g

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.304253	0.599629	distance	2	4	brute
1	2	0.304253	0.599629	distance	2	4	ball_tree
2	2	0.304253	0.599629	distance	2	4	kd_tree
3	4	0.301518	0.598900	distance	3	4	ball_tree
4	4	0.301518	0.598900	distance	3	4	kd_tree
5	4	0.301518	0.598900	distance	3	4	brute
6	7	0.302131	0.598388	distance	3	5	kd_tree
7	7	0.302131	0.598388	distance	3	5	brute
8	7	0.302131	0.598388	distance	3	5	ball_tree
9	10	0.300992	0.597931	distance	2	6	brute
10	11	0.300992	0.597931	distance	2	6	kd_tree
11	11	0.300992	0.597931	distance	2	6	ball_tree
12	13	0.302958	0.597465	distance	2	5	brute
13	14	0.302958	0.597465	distance	2	5	kd_tree
14	14	0.302958	0.597465	distance	2	5	ball_tree
15	16	0.301069	0.595693	distance	3	6	ball_tree
16	16	0.301069	0.595693	distance	3	6	brute
17	16	0.301069	0.595693	distance	3	6	kd_tree
18	19	0.303764	0.593767	uniform	2	4	brute
19	19	0.303764	0.593767	uniform	2	4	kd_tree
20	19	0.303764	0.593767	uniform	2	4	ball_tree
21	22	0.291073	0.593565	distance	1	6	ball_tree
22	22	0.291073	0.593565	distance	1	6	kd_tree
23	22	0.291073	0.593565	distance	1	6	brute
24	25	0.299959	0.592578	uniform	3	4	kd_tree

Tabela 130: Hiperparâmetros: happy_data_knn_m_x_1_err_g

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	25	0.299959	0.592578	uniform	3	4	ball_tree
26	25	0.299959	0.592578	uniform	3	4	brute
27	28	0.294295	0.590445	distance	1	5	kd_tree
28	28	0.294295	0.590445	distance	1	5	brute
29	28	0.294295	0.590445	distance	1	5	ball_tree
30	31	0.299540	0.589383	uniform	3	5	kd_tree
31	31	0.299540	0.589383	uniform	3	5	ball_tree
32	31	0.299540	0.589383	uniform	3	5	brute
33	34	0.300530	0.588781	uniform	2	5	brute
34	34	0.300530	0.588781	uniform	2	5	kd_tree
35	34	0.300530	0.588781	uniform	2	5	ball_tree
36	37	0.297977	0.588181	uniform	2	6	kd_tree
37	37	0.297977	0.588181	uniform	2	6	brute
38	37	0.297977	0.588181	uniform	2	6	ball_tree
39	40	0.297759	0.585525	uniform	3	6	kd_tree
40	40	0.297759	0.585525	uniform	3	6	ball_tree
41	40	0.297759	0.585525	uniform	3	6	brute
42	43	0.289808	0.585489	distance	1	4	kd_tree
43	43	0.289808	0.585489	distance	1	4	brute
44	45	0.289808	0.585489	distance	1	4	ball_tree
45	46	0.286487	0.582612	uniform	1	6	kd_tree
46	46	0.286487	0.582612	uniform	1	6	ball_tree
47	46	0.286487	0.582612	uniform	1	6	brute
48	49	0.291270	0.582150	uniform	1	5	brute
49	49	0.291270	0.582150	uniform	1	5	ball_tree

Tabela 131: Hiperparâmetros: happy_data_knn_m_x_1_err_r

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.185188	0.616746	distance	2	4	brute
1	2	0.185188	0.616746	distance	2	4	kd_tree
2	2	0.185188	0.616746	distance	2	4	ball_tree
3	4	0.184221	0.609469	distance	3	4	ball_tree
4	4	0.184221	0.609469	distance	3	4	brute
5	4	0.184221	0.609469	distance	3	4	kd_tree
6	7	0.183357	0.593542	distance	2	5	brute
7	8	0.183357	0.593542	distance	2	5	kd_tree
8	8	0.183357	0.593542	distance	2	5	ball_tree
9	10	0.158007	0.592578	distance	1	4	brute
10	10	0.158007	0.592578	distance	1	4	kd_tree
11	12	0.158007	0.592578	distance	1	4	ball_tree
12	13	0.183806	0.586047	distance	3	5	brute
13	13	0.183806	0.586047	distance	3	5	kd_tree
14	13	0.183806	0.586047	distance	3	5	ball_tree
15	16	0.149950	0.578382	distance	1	5	ball_tree
16	16	0.149950	0.578382	distance	1	5	brute
17	16	0.149950	0.578382	distance	1	5	kd_tree
18	19	0.179847	0.571635	distance	2	6	brute
19	20	0.179847	0.571635	distance	2	6	ball_tree
20	20	0.179847	0.571635	distance	2	6	kd_tree
21	22	0.183981	0.567567	distance	3	6	brute
22	22	0.183981	0.567567	distance	3	6	ball_tree
23	22	0.183981	0.567567	distance	3	6	kd_tree
24	25	0.152078	0.566846	distance	1	6	ball_tree

Tabela 132: Hiperparâmetros: happy_data_knn_m_x_1_err_r

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	25	0.152078	0.566846	distance	1	6	brute
26	25	0.152078	0.566846	distance	1	6	kd_tree
27	28	0.194753	0.546266	uniform	2	4	kd_tree
28	28	0.194753	0.546266	uniform	2	4	brute
29	28	0.194753	0.546266	uniform	2	4	ball_tree
30	31	0.190848	0.537769	uniform	3	4	brute
31	31	0.190848	0.537769	uniform	3	4	ball_tree
32	31	0.190848	0.537769	uniform	3	4	kd_tree
33	34	0.142909	0.520943	uniform	1	4	kd_tree
34	34	0.142909	0.520943	uniform	1	4	brute
35	36	0.142909	0.520942	uniform	1	4	ball_tree
36	37	0.183733	0.508670	uniform	2	5	brute
37	37	0.183733	0.508670	uniform	2	5	ball_tree
38	37	0.183733	0.508670	uniform	2	5	kd_tree
39	40	0.180791	0.501529	uniform	3	5	brute
40	40	0.180791	0.501529	uniform	3	5	ball_tree
41	40	0.180791	0.501529	uniform	3	5	kd_tree
42	43	0.124440	0.494634	uniform	1	5	kd_tree
43	43	0.124440	0.494634	uniform	1	5	brute
44	43	0.124440	0.494634	uniform	1	5	ball_tree
45	46	0.122418	0.479345	uniform	1	6	ball_tree
46	46	0.122418	0.479345	uniform	1	6	brute
47	46	0.122418	0.479345	uniform	1	6	kd_tree
48	49	0.172957	0.477783	uniform	3	6	brute
49	49	0.172957	0.477783	uniform	3	6	ball_tree

Tabela 133: Hiperparâmetros: happy_data_knn_m_x_1_err_i

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.106384	0.463117	distance	1	5	kd_tree
1	1	0.106384	0.463117	distance	1	5	ball_tree
2	1	0.106384	0.463117	distance	1	5	brute
3	4	0.172758	0.453272	distance	2	4	brute
4	5	0.172758	0.453272	distance	2	4	kd_tree
5	5	0.172758	0.453272	distance	2	4	ball_tree
6	7	0.161867	0.453002	distance	3	4	brute
7	7	0.161867	0.453002	distance	3	4	ball_tree
8	7	0.161867	0.453002	distance	3	4	kd_tree
9	10	0.153180	0.452803	distance	1	4	kd_tree
10	10	0.153180	0.452803	distance	1	4	brute
11	12	0.153180	0.452803	distance	1	4	ball_tree
12	13	0.114137	0.451282	distance	3	5	ball_tree
13	13	0.114137	0.451282	distance	3	5	kd_tree
14	13	0.114137	0.451282	distance	3	5	brute
15	16	0.076651	0.451174	distance	1	6	ball_tree
16	16	0.076651	0.451174	distance	1	6	kd_tree
17	16	0.076651	0.451174	distance	1	6	brute
18	19	0.131908	0.441847	distance	2	5	brute
19	20	0.131908	0.441847	distance	2	5	ball_tree
20	20	0.131908	0.441847	distance	2	5	kd_tree
21	22	0.099543	0.433728	distance	2	6	brute
22	23	0.099543	0.433728	distance	2	6	ball_tree
23	23	0.099543	0.433728	distance	2	6	kd_tree
24	25	0.089659	0.432015	distance	3	6	kd_tree

Tabela 134: Hiperparâmetros: happy_data_knn_m_x_1_err_i

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	25	0.089659	0.432015	distance	3	6	brute
26	25	0.089659	0.432015	distance	3	6	ball_tree
27	28	0.124257	0.423298	uniform	2	4	kd_tree
28	28	0.124257	0.423298	uniform	2	4	brute
29	28	0.124257	0.423298	uniform	2	4	ball_tree
30	31	0.040607	0.422206	uniform	1	5	brute
31	31	0.040607	0.422206	uniform	1	5	ball_tree
32	31	0.040607	0.422206	uniform	1	5	kd_tree
33	34	0.117849	0.419029	uniform	3	4	kd_tree
34	34	0.117849	0.419029	uniform	3	4	brute
35	34	0.117849	0.419029	uniform	3	4	ball_tree
36	37	0.101065	0.405754	uniform	1	4	brute
37	37	0.101065	0.405754	uniform	1	4	kd_tree
38	39	0.101065	0.405753	uniform	1	4	ball_tree
39	40	0.021697	0.405320	uniform	1	6	kd_tree
40	40	0.021697	0.405320	uniform	1	6	ball_tree
41	40	0.021697	0.405320	uniform	1	6	brute
42	43	0.073595	0.405182	uniform	3	5	kd_tree
43	43	0.073595	0.405182	uniform	3	5	brute
44	43	0.073595	0.405182	uniform	3	5	ball_tree
45	46	0.083530	0.395935	uniform	2	5	brute
46	46	0.083530	0.395935	uniform	2	5	ball_tree
47	46	0.083530	0.395935	uniform	2	5	kd_tree
48	49	0.056858	0.379463	uniform	3	6	brute
49	49	0.056858	0.379463	uniform	3	6	ball_tree

Tabela 135: Hiperparâmetros: happy_data_knn_m_x_1_err_z

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.138722	0.613589	distance	1	4	ball_tree
1	2	0.138721	0.613588	distance	1	4	brute
2	2	0.138721	0.613588	distance	1	4	kd_tree
3	4	0.124935	0.612115	distance	1	6	brute
4	4	0.124935	0.612115	distance	1	6	ball_tree
5	4	0.124935	0.612115	distance	1	6	kd_tree
6	7	0.137786	0.609698	distance	1	5	ball_tree
7	7	0.137786	0.609698	distance	1	5	kd_tree
8	7	0.137786	0.609698	distance	1	5	brute
9	10	0.151270	0.606711	distance	2	4	brute
10	11	0.151270	0.606711	distance	2	4	ball_tree
11	11	0.151270	0.606711	distance	2	4	kd_tree
12	13	0.144003	0.605000	distance	2	5	brute
13	14	0.144003	0.605000	distance	2	5	kd_tree
14	14	0.144003	0.605000	distance	2	5	ball_tree
15	16	0.142490	0.602076	distance	3	4	ball_tree
16	16	0.142490	0.602076	distance	3	4	brute
17	16	0.142490	0.602076	distance	3	4	kd_tree
18	19	0.134319	0.601936	uniform	1	4	ball_tree
19	20	0.134319	0.601935	uniform	1	4	brute
20	20	0.134319	0.601935	uniform	1	4	kd_tree
21	22	0.143467	0.600135	distance	2	6	brute
22	23	0.143467	0.600135	distance	2	6	ball_tree
23	23	0.143467	0.600135	distance	2	6	kd_tree
24	25	0.139225	0.596781	distance	3	5	ball_tree

Tabela 136: Hiperparâmetros: happy_data_knn_m_x_1_err_z

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	25	0.139225	0.596781	distance	3	5	brute
26	25	0.139225	0.596781	distance	3	5	kd_tree
27	28	0.129687	0.590067	uniform	1	5	brute
28	28	0.129687	0.590067	uniform	1	5	kd_tree
29	28	0.129687	0.590067	uniform	1	5	ball_tree
30	31	0.114180	0.589157	uniform	1	6	ball_tree
31	31	0.114180	0.589157	uniform	1	6	brute
32	31	0.114180	0.589157	uniform	1	6	kd_tree
33	34	0.143224	0.587991	distance	3	6	kd_tree
34	34	0.143224	0.587991	distance	3	6	brute
35	34	0.143224	0.587991	distance	3	6	ball_tree
36	37	0.141620	0.586357	uniform	2	4	ball_tree
37	37	0.141620	0.586357	uniform	2	4	brute
38	37	0.141620	0.586357	uniform	2	4	kd_tree
39	40	0.132943	0.579066	uniform	2	5	brute
40	40	0.132943	0.579066	uniform	2	5	ball_tree
41	40	0.132943	0.579066	uniform	2	5	kd_tree
42	43	0.130327	0.576791	uniform	3	4	kd_tree
43	43	0.130327	0.576791	uniform	3	4	ball_tree
44	43	0.130327	0.576791	uniform	3	4	brute
45	46	0.131614	0.572987	uniform	2	6	ball_tree
46	46	0.131614	0.572987	uniform	2	6	brute
47	46	0.131614	0.572987	uniform	2	6	kd_tree
48	49	0.126880	0.567324	uniform	3	5	brute
49	49	0.126880	0.567324	uniform	3	5	ball_tree

Tabela 137: Hiperparâmetros: happy_data_mlp_m_x_1_err_u

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.006110	0.801007	adam	250	(5, 5)	tanh
1	1	0.006110	0.801007	adam	500	(5, 5)	tanh
2	3	0.025169	0.779220	adam	500	(5, 5)	logistic
3	4	0.006265	0.774977	adam	100	(5, 5)	tanh
4	5	0.013335	0.753558	adam	250	(5, 5)	logistic
5	6	0.008524	0.684077	lbfgs	500	10	logistic
6	7	0.006516	0.682533	lbfgs	250	10	logistic
7	8	0.006951	0.678768	lbfgs	500	10	tanh
8	8	0.006951	0.678768	lbfgs	250	10	tanh
9	10	0.016073	0.659544	lbfgs	100	10	tanh
10	11	0.006243	0.657807	adam	100	(5, 5)	logistic
11	12	0.014275	0.648797	lbfgs	100	10	logistic
12	13	0.018068	0.641545	adam	250	5	tanh
13	13	0.018068	0.641545	adam	500	5	tanh
14	15	0.026844	0.635830	adam	250	10	tanh
15	15	0.026844	0.635830	adam	500	10	tanh
16	17	0.013620	0.634024	adam	100	5	tanh
17	18	0.026529	0.631641	adam	500	10	logistic
18	19	0.020212	0.628114	adam	250	10	logistic
19	20	0.007413	0.613874	adam	100	10	tanh
20	21	0.008113	0.597528	adam	100	10	logistic
21	22	0.025562	0.570771	lbfgs	500	5	relu
22	23	0.011245	0.562291	lbfgs	250	5	relu
23	24	0.008124	0.555995	sgd	250	10	logistic
24	24	0.008124	0.555995	sgd	500	10	logistic

Tabela 138: Hiperparâmetros: happy_data_mlp_m_x_1_err_u

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	26	0.012880	0.552759	lbfgs	500	10	relu
26	27	0.010762	0.552468	adam	100	5	logistic
27	27	0.010762	0.552468	adam	500	5	logistic
28	27	0.010762	0.552468	adam	250	5	logistic
29	30	0.014059	0.548296	sgd	500	5	tanh
30	30	0.014059	0.548296	sgd	100	5	tanh
31	30	0.014059	0.548296	sgd	250	5	tanh
32	33	0.005984	0.548122	lbfgs	100	5	relu
33	34	0.009723	0.547747	lbfgs	250	10	relu
34	35	0.007659	0.541511	lbfgs	100	(5, 5)	identity
35	36	0.007507	0.541405	lbfgs	500	(5, 5)	identity
36	36	0.007507	0.541405	lbfgs	250	(5, 5)	identity
37	38	0.007512	0.541405	lbfgs	250	10	identity
38	38	0.007512	0.541405	lbfgs	500	10	identity
39	40	0.007263	0.541054	lbfgs	100	5	identity
40	41	0.007274	0.541043	lbfgs	250	5	identity
41	41	0.007274	0.541043	lbfgs	500	5	identity
42	43	0.006234	0.540789	adam	250	5	relu
43	43	0.006234	0.540789	adam	500	5	relu
44	43	0.006234	0.540789	adam	100	5	relu
45	46	0.011494	0.534041	adam	100	10	identity
46	47	0.007485	0.531341	lbfgs	100	10	identity
47	48	0.008923	0.531111	adam	500	10	identity
48	48	0.008923	0.531111	adam	250	10	identity
49	50	0.025521	0.525712	adam	250	(5, 5)	identity

Tabela 139: Hiperparâmetros: happy_data_mlp_m_x_1_err_u

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	50	0.025521	0.525712	adam	500	(5, 5)	identity
51	50	0.025521	0.525712	adam	100	(5, 5)	identity
52	53	0.011968	0.524600	adam	250	5	identity
53	53	0.011968	0.524600	adam	500	5	identity
54	53	0.011968	0.524600	adam	100	5	identity
55	56	0.019096	0.522504	adam	100	10	relu
56	57	0.020608	0.521602	adam	250	10	relu
57	57	0.020608	0.521602	adam	500	10	relu
58	59	0.007050	0.517759	sgd	100	10	logistic
59	60	0.032621	0.512430	lbfgs	100	10	relu
60	61	0.007814	0.481945	sgd	100	5	logistic
61	61	0.007814	0.481945	sgd	250	5	logistic
62	61	0.007814	0.481945	sgd	500	5	logistic
63	64	0.202239	0.100872	sgd	250	10	tanh
64	64	0.202239	0.100872	sgd	500	10	tanh
65	64	0.202239	0.100872	sgd	100	10	tanh
66	67	0.000241	-0.000063	sgd	500	(5, 5)	logistic
67	67	0.000241	-0.000063	sgd	250	(5, 5)	logistic
68	67	0.000241	-0.000063	sgd	100	(5, 5)	logistic
69	70	0.000286	-0.000218	lbfgs	500	5	logistic
70	70	0.000286	-0.000218	lbfgs	250	5	logistic
71	70	0.000286	-0.000218	lbfgs	100	5	logistic
72	73	0.000288	-0.000219	lbfgs	100	(5, 5)	tanh
73	73	0.000288	-0.000219	lbfgs	250	(5, 5)	tanh
74	73	0.000288	-0.000219	lbfgs	500	(5, 5)	tanh

Tabela 140: Hiperparâmetros: happy_data_mlp_m_x_1_err_u

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	76	0.000206	-0.000219	sgd	500	5	relu
76	76	0.000206	-0.000219	sgd	250	5	relu
77	76	0.000206	-0.000219	sgd	100	5	relu
78	79	0.000286	-0.000219	lbfgs	500	5	tanh
79	79	0.000286	-0.000219	lbfgs	250	5	tanh
80	79	0.000286	-0.000219	lbfgs	100	5	tanh
81	82	0.000286	-0.000221	lbfgs	500	(5, 5)	logistic
82	82	0.000286	-0.000221	lbfgs	250	(5, 5)	logistic
83	82	0.000286	-0.000221	lbfgs	100	(5, 5)	logistic
84	85	0.000281	-0.000231	sgd	250	10	relu
85	85	0.000281	-0.000231	sgd	500	10	relu
86	85	0.000281	-0.000231	sgd	100	10	relu
87	88	0.000428	-0.000234	adam	250	(5, 5)	relu
88	88	0.000428	-0.000234	adam	100	(5, 5)	relu
89	88	0.000428	-0.000234	adam	500	(5, 5)	relu
90	91	0.000286	-0.000327	lbfgs	500	(5, 5)	relu
91	91	0.000286	-0.000327	lbfgs	250	(5, 5)	relu
92	91	0.000286	-0.000327	lbfgs	100	(5, 5)	relu
93	94	0.000421	-0.000472	sgd	500	(5, 5)	relu
94	94	0.000421	-0.000472	sgd	250	(5, 5)	relu
95	94	0.000421	-0.000472	sgd	100	(5, 5)	relu
96	97	0.000905	-0.000741	sgd	500	(5, 5)	tanh
97	97	0.000905	-0.000741	sgd	100	(5, 5)	tanh
98	97	0.000905	-0.000741	sgd	250	(5, 5)	tanh
99	100	NaN	NaN	sgd	250	5	identity

Tabela 141: Hiperparâmetros: happy_data_mlp_m_x_1_err_g

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.254234	0.537774	adam	100	(5, 5)	tanh
1	2	0.236322	0.527289	lbfgs	250	5	logistic
2	3	0.247007	0.497339	lbfgs	100	5	logistic
3	4	0.264324	0.485614	lbfgs	250	10	relu
4	5	0.237526	0.476766	lbfgs	250	10	logistic
5	6	0.246695	0.470797	adam	500	(5, 5)	logistic
6	6	0.246695	0.470797	adam	100	(5, 5)	logistic
7	6	0.246695	0.470797	adam	250	(5, 5)	logistic
8	9	0.252549	0.470102	adam	250	(5, 5)	tanh
9	9	0.252549	0.470102	adam	500	(5, 5)	tanh
10	11	0.247412	0.463787	adam	500	10	tanh
11	11	0.247412	0.463787	adam	250	10	tanh
12	13	0.250189	0.456702	lbfgs	100	5	relu
13	14	0.244136	0.456549	adam	100	10	tanh
14	15	0.215225	0.453745	lbfgs	100	10	logistic
15	16	0.224988	0.444584	adam	250	10	logistic
16	16	0.224988	0.444584	adam	500	10	logistic
17	16	0.224988	0.444584	adam	100	10	logistic
18	19	0.296807	0.442040	lbfgs	250	5	relu
19	20	0.280382	0.437695	lbfgs	500	5	relu
20	21	0.262550	0.424192	lbfgs	500	5	logistic
21	22	0.223767	0.417148	lbfgs	500	10	relu
22	23	0.209507	0.372234	adam	100	5	tanh
23	23	0.209507	0.372234	adam	500	5	tanh
24	23	0.209507	0.372234	adam	250	5	tanh

Tabela 142: Hiperparâmetros: happy_data_mlp_m_x_1_err_g

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	26	0.216971	0.370290	lbfgs	100	10	relu
26	27	0.325080	0.366076	lbfgs	500	(5, 5)	tanh
27	28	0.245555	0.365792	lbfgs	500	10	tanh
28	29	0.205011	0.364725	adam	100	5	logistic
29	29	0.205011	0.364725	adam	500	5	logistic
30	29	0.205011	0.364725	adam	250	5	logistic
31	32	0.208161	0.363781	adam	500	5	relu
32	32	0.208161	0.363781	adam	250	5	relu
33	32	0.208161	0.363781	adam	100	5	relu
34	35	0.315118	0.358358	lbfgs	250	(5, 5)	tanh
35	36	0.211882	0.342373	lbfgs	500	10	identity
36	36	0.211882	0.342373	lbfgs	250	10	identity
37	38	0.212189	0.342020	lbfgs	250	5	identity
38	38	0.212189	0.342020	lbfgs	500	5	identity
39	40	0.211714	0.341169	lbfgs	100	(5, 5)	identity
40	41	0.214010	0.340844	lbfgs	100	5	identity
41	42	0.209959	0.340681	lbfgs	500	(5, 5)	identity
42	42	0.209959	0.340681	lbfgs	250	(5, 5)	identity
43	44	0.166357	0.334556	sgd	250	10	tanh
44	44	0.166357	0.334556	sgd	100	10	tanh
45	44	0.166357	0.334556	sgd	500	10	tanh
46	47	0.280041	0.322737	lbfgs	100	(5, 5)	tanh
47	48	0.169811	0.305789	lbfgs	100	10	tanh
48	49	0.199392	0.298037	lbfgs	100	10	identity
49	50	0.194616	0.284836	adam	100	5	identity

Tabela 143: Hiperparâmetros: happy_data_mlp_m_x_1_err_g

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	50	0.194616	0.284836	adam	500	5	identity
51	50	0.194616	0.284836	adam	250	5	identity
52	53	0.173537	0.282794	adam	250	(5, 5)	identity
53	53	0.173537	0.282794	adam	100	(5, 5)	identity
54	53	0.173537	0.282794	adam	500	(5, 5)	identity
55	56	0.197717	0.279615	adam	100	10	relu
56	57	0.194820	0.277335	adam	500	10	relu
57	57	0.194820	0.277335	adam	250	10	relu
58	59	0.204558	0.229345	adam	100	10	identity
59	60	0.203487	0.227771	adam	500	10	identity
60	60	0.203487	0.227771	adam	250	10	identity
61	62	0.035133	0.064607	sgd	100	10	logistic
62	62	0.035133	0.064607	sgd	500	10	logistic
63	62	0.035133	0.064607	sgd	250	10	logistic
64	65	0.477366	0.054983	lbfgs	500	10	logistic
65	66	0.028528	0.047963	sgd	500	5	logistic
66	66	0.028528	0.047963	sgd	100	5	logistic
67	66	0.028528	0.047963	sgd	250	5	logistic
68	69	0.000525	0.000573	sgd	500	(5, 5)	logistic
69	69	0.000525	0.000573	sgd	250	(5, 5)	logistic
70	69	0.000525	0.000573	sgd	100	(5, 5)	logistic
71	72	0.000090	-0.000045	sgd	500	5	tanh
72	72	0.000090	-0.000045	sgd	100	5	tanh
73	72	0.000090	-0.000045	sgd	250	5	tanh
74	75	0.000053	-0.000064	sgd	100	10	relu

Tabela 144: Hiperparâmetros: happy_data_mlp_m_x_1_err_g

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	75	0.000053	-0.000064	sgd	500	10	relu
76	75	0.000053	-0.000064	sgd	250	10	relu
77	78	0.000102	-0.000067	adam	250	(5, 5)	relu
78	78	0.000102	-0.000067	adam	100	(5, 5)	relu
79	78	0.000102	-0.000067	adam	500	(5, 5)	relu
80	81	0.000072	-0.000107	lbfgs	100	(5, 5)	logistic
81	81	0.000072	-0.000107	lbfgs	250	(5, 5)	logistic
82	81	0.000072	-0.000107	lbfgs	500	(5, 5)	logistic
83	84	0.000072	-0.000107	lbfgs	100	5	tanh
84	84	0.000072	-0.000107	lbfgs	250	5	tanh
85	84	0.000072	-0.000107	lbfgs	500	5	tanh
86	87	0.000091	-0.000130	sgd	100	5	relu
87	87	0.000091	-0.000130	sgd	250	5	relu
88	87	0.000091	-0.000130	sgd	500	5	relu
89	90	0.000347	-0.000277	lbfgs	250	(5, 5)	relu
90	90	0.000347	-0.000277	lbfgs	100	(5, 5)	relu
91	90	0.000347	-0.000277	lbfgs	500	(5, 5)	relu
92	93	0.000413	-0.000413	sgd	100	(5, 5)	relu
93	93	0.000413	-0.000413	sgd	500	(5, 5)	relu
94	93	0.000413	-0.000413	sgd	250	(5, 5)	relu
95	96	0.010047	-0.003091	sgd	100	(5, 5)	tanh
96	96	0.010047	-0.003091	sgd	500	(5, 5)	tanh
97	96	0.010047	-0.003091	sgd	250	(5, 5)	tanh
98	99	0.788891	-0.128398	lbfgs	250	10	tanh
99	100	NaN	NaN	sgd	250	10	identity

Tabela 145: Hiperparâmetros: happy_data_mlp_m_x_1_err_r

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.072749	0.492202	lbfgs	250	5	logistic
1	1	0.072749	0.492202	lbfgs	500	5	logistic
2	3	0.052007	0.486458	lbfgs	100	5	logistic
3	4	0.100541	0.434628	lbfgs	100	5	relu
4	5	0.104696	0.427889	lbfgs	250	5	relu
5	6	0.136378	0.412154	lbfgs	500	5	relu
6	7	0.202420	0.371286	lbfgs	250	10	logistic
7	8	0.199601	0.368250	lbfgs	500	10	logistic
8	9	0.157381	0.359049	lbfgs	100	10	tanh
9	10	0.158002	0.358345	lbfgs	250	10	tanh
10	10	0.158002	0.358345	lbfgs	500	10	tanh
11	12	0.137750	0.350728	lbfgs	250	10	relu
12	13	0.118914	0.330529	lbfgs	500	10	relu
13	14	0.168706	0.311306	lbfgs	100	10	logistic
14	15	0.108044	0.304965	lbfgs	500	10	identity
15	15	0.108044	0.304965	lbfgs	250	10	identity
16	17	0.109495	0.304406	lbfgs	500	5	identity
17	17	0.109495	0.304406	lbfgs	250	5	identity
18	17	0.109495	0.304406	lbfgs	100	5	identity
19	20	0.107928	0.304324	lbfgs	500	(5, 5)	identity
20	21	0.108056	0.304237	lbfgs	250	(5, 5)	identity
21	22	0.118658	0.297349	lbfgs	100	10	identity
22	23	0.113124	0.294712	lbfgs	100	10	relu
23	24	0.119072	0.274390	adam	500	5	identity
24	24	0.119072	0.274390	adam	250	5	identity

Tabela 146: Hiperparâmetros: happy_data_mlp_m_x_1_err_r

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	24	0.119072	0.274390	adam	100	5	identity
26	27	0.079445	0.273208	lbfgs	100	(5, 5)	identity
27	28	0.101068	0.257892	adam	500	5	relu
28	28	0.101068	0.257892	adam	250	5	relu
29	28	0.101068	0.257892	adam	100	5	relu
30	31	0.072364	0.241570	adam	500	5	tanh
31	31	0.072364	0.241570	adam	100	5	tanh
32	31	0.072364	0.241570	adam	250	5	tanh
33	34	0.098752	0.212331	adam	500	(5, 5)	tanh
34	34	0.098752	0.212331	adam	250	(5, 5)	tanh
35	34	0.098752	0.212331	adam	100	(5, 5)	tanh
36	37	0.088596	0.201223	adam	500	10	relu
37	37	0.088596	0.201223	adam	250	10	relu
38	39	0.130737	0.179260	adam	500	10	identity
39	39	0.130737	0.179260	adam	100	10	identity
40	39	0.130737	0.179260	adam	250	10	identity
41	42	0.058476	0.170805	adam	100	10	tanh
42	42	0.058476	0.170805	adam	500	10	tanh
43	42	0.058476	0.170805	adam	250	10	tanh
44	45	0.051441	0.156738	adam	100	10	logistic
45	45	0.051441	0.156738	adam	250	10	logistic
46	45	0.051441	0.156738	adam	500	10	logistic
47	48	0.039063	0.103361	adam	250	5	logistic
48	48	0.039063	0.103361	adam	500	5	logistic
49	48	0.039063	0.103361	adam	100	5	logistic

Tabela 147: Hiperparâmetros: happy_data_mlp_m_x_1_err_r

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	51	0.232642	0.084731	adam	100	(5, 5)	identity
51	51	0.232642	0.084731	adam	250	(5, 5)	identity
52	51	0.232642	0.084731	adam	500	(5, 5)	identity
53	54	0.028578	0.078906	adam	500	(5, 5)	logistic
54	54	0.028578	0.078906	adam	100	(5, 5)	logistic
55	54	0.028578	0.078906	adam	250	(5, 5)	logistic
56	57	0.165119	0.048087	adam	100	10	relu
57	58	0.014413	0.043648	sgd	500	10	tanh
58	58	0.014413	0.043648	sgd	250	10	tanh
59	58	0.014413	0.043648	sgd	100	10	tanh
60	61	0.012935	0.029191	sgd	100	10	logistic
61	61	0.012935	0.029191	sgd	250	10	logistic
62	61	0.012935	0.029191	sgd	500	10	logistic
63	64	0.021702	0.019666	sgd	250	5	logistic
64	64	0.021702	0.019666	sgd	500	5	logistic
65	64	0.021702	0.019666	sgd	100	5	logistic
66	67	0.041749	0.012660	sgd	250	(5, 5)	tanh
67	67	0.041749	0.012660	sgd	100	(5, 5)	tanh
68	67	0.041749	0.012660	sgd	500	(5, 5)	tanh
69	70	0.000625	0.001017	sgd	100	(5, 5)	logistic
70	70	0.000625	0.001017	sgd	500	(5, 5)	logistic
71	70	0.000625	0.001017	sgd	250	(5, 5)	logistic
72	73	0.000146	-0.000128	sgd	100	10	relu
73	73	0.000146	-0.000128	sgd	250	10	relu
74	73	0.000146	-0.000128	sgd	500	10	relu

Tabela 148: Hiperparâmetros: happy_data_mlp_m_x_1_err_r

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	76	0.000188	-0.000174	lbfgs	100	(5, 5)	logistic
76	76	0.000188	-0.000174	lbfgs	500	(5, 5)	logistic
77	76	0.000188	-0.000174	lbfgs	250	(5, 5)	logistic
78	79	0.000188	-0.000174	lbfgs	100	5	tanh
79	79	0.000188	-0.000174	lbfgs	250	5	tanh
80	79	0.000188	-0.000174	lbfgs	500	5	tanh
81	82	0.000199	-0.000174	adam	500	(5, 5)	relu
82	82	0.000199	-0.000174	adam	250	(5, 5)	relu
83	82	0.000199	-0.000174	adam	100	(5, 5)	relu
84	85	0.000187	-0.000175	lbfgs	500	(5, 5)	tanh
85	85	0.000187	-0.000175	lbfgs	250	(5, 5)	tanh
86	85	0.000187	-0.000175	lbfgs	100	(5, 5)	tanh
87	88	0.000193	-0.000177	lbfgs	500	(5, 5)	relu
88	88	0.000193	-0.000177	lbfgs	250	(5, 5)	relu
89	88	0.000193	-0.000177	lbfgs	100	(5, 5)	relu
90	91	0.000189	-0.000224	sgd	500	5	relu
91	91	0.000189	-0.000224	sgd	100	5	relu
92	91	0.000189	-0.000224	sgd	250	5	relu
93	94	0.000410	-0.000233	sgd	250	5	tanh
94	94	0.000410	-0.000233	sgd	500	5	tanh
95	94	0.000410	-0.000233	sgd	100	5	tanh
96	97	0.001843	-0.001040	sgd	500	(5, 5)	relu
97	97	0.001843	-0.001040	sgd	250	(5, 5)	relu
98	97	0.001843	-0.001040	sgd	100	(5, 5)	relu
99	100	NaN	NaN	sgd	250	(5, 5)	identity

Tabela 149: Hiperparâmetros: happy_data_mlp_m_x_1_err_i

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.157663	0.266045	lbfgs	500	5	relu
1	2	0.184107	0.244784	lbfgs	250	5	relu
2	3	0.337750	0.169250	adam	100	(5, 5)	tanh
3	3	0.337750	0.169250	adam	250	(5, 5)	tanh
4	3	0.337750	0.169250	adam	500	(5, 5)	tanh
5	6	0.164145	0.139039	lbfgs	500	10	relu
6	7	0.344220	0.129244	lbfgs	500	10	tanh
7	7	0.344220	0.129244	lbfgs	250	10	tanh
8	9	0.094005	0.116658	sgd	500	(5, 5)	tanh
9	9	0.094005	0.116658	sgd	100	(5, 5)	tanh
10	9	0.094005	0.116658	sgd	250	(5, 5)	tanh
11	12	0.032299	0.110372	adam	250	10	tanh
12	12	0.032299	0.110372	adam	500	10	tanh
13	12	0.032299	0.110372	adam	100	10	tanh
14	15	0.436328	0.109645	lbfgs	100	10	tanh
15	16	0.103611	0.108300	lbfgs	250	10	relu
16	17	0.039604	0.085130	adam	250	5	tanh
17	17	0.039604	0.085130	adam	500	5	tanh
18	17	0.039604	0.085130	adam	100	5	tanh
19	20	0.199818	0.083464	adam	100	5	relu
20	20	0.199818	0.083464	adam	250	5	relu
21	20	0.199818	0.083464	adam	500	5	relu
22	23	0.033499	0.075660	adam	500	10	logistic
23	23	0.033499	0.075660	adam	250	10	logistic
24	23	0.033499	0.075660	adam	100	10	logistic

Tabela 150: Hiperparâmetros: happy_data_mlp_m_x_1_err_i

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	26	0.014220	0.051685	lbfgs	100	10	logistic
26	27	0.070202	0.033711	lbfgs	500	10	identity
27	28	0.022421	0.032363	adam	250	(5, 5)	logistic
28	28	0.022421	0.032363	adam	100	(5, 5)	logistic
29	28	0.022421	0.032363	adam	500	(5, 5)	logistic
30	31	0.076029	0.032265	lbfgs	500	(5, 5)	identity
31	32	0.076927	0.031799	lbfgs	250	(5, 5)	identity
32	33	0.075087	0.031145	lbfgs	250	10	identity
33	34	0.078467	0.029418	lbfgs	500	5	identity
34	34	0.078467	0.029418	lbfgs	250	5	identity
35	36	0.021587	0.025552	adam	100	5	logistic
36	36	0.021587	0.025552	adam	250	5	logistic
37	36	0.021587	0.025552	adam	500	5	logistic
38	39	0.078456	0.025400	lbfgs	100	5	identity
39	40	0.026661	0.016547	lbfgs	500	5	logistic
40	40	0.026661	0.016547	lbfgs	100	5	logistic
41	40	0.026661	0.016547	lbfgs	250	5	logistic
42	43	0.111178	0.016181	lbfgs	100	(5, 5)	identity
43	44	0.010303	0.011455	sgd	250	10	logistic
44	44	0.010303	0.011455	sgd	100	10	logistic
45	44	0.010303	0.011455	sgd	500	10	logistic
46	47	0.006753	0.007432	sgd	100	10	tanh
47	47	0.006753	0.007432	sgd	500	10	tanh
48	47	0.006753	0.007432	sgd	250	10	tanh
49	50	0.068052	0.002505	lbfgs	100	10	relu

Tabela 151: Hiperparâmetros: happy_data_mlp_m_x_1_err_i

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	51	0.000491	0.000596	sgd	250	(5, 5)	logistic
51	51	0.000491	0.000596	sgd	500	(5, 5)	logistic
52	51	0.000491	0.000596	sgd	100	(5, 5)	logistic
53	54	0.000632	-0.000499	sgd	100	(5, 5)	relu
54	54	0.000632	-0.000499	sgd	500	(5, 5)	relu
55	54	0.000632	-0.000499	sgd	250	(5, 5)	relu
56	57	0.000676	-0.000523	sgd	500	10	relu
57	57	0.000676	-0.000523	sgd	250	10	relu
58	57	0.000676	-0.000523	sgd	100	10	relu
59	60	0.000592	-0.000530	sgd	250	5	tanh
60	60	0.000592	-0.000530	sgd	500	5	tanh
61	60	0.000592	-0.000530	sgd	100	5	tanh
62	63	0.000740	-0.000583	lbfgs	100	(5, 5)	logistic
63	63	0.000740	-0.000583	lbfgs	500	(5, 5)	logistic
64	63	0.000740	-0.000583	lbfgs	250	(5, 5)	logistic
65	66	0.000740	-0.000585	lbfgs	500	5	tanh
66	66	0.000740	-0.000585	lbfgs	100	5	tanh
67	66	0.000740	-0.000585	lbfgs	250	5	tanh
68	69	0.000740	-0.000585	lbfgs	500	(5, 5)	relu
69	69	0.000740	-0.000585	lbfgs	100	(5, 5)	relu
70	69	0.000740	-0.000585	lbfgs	250	(5, 5)	relu
71	72	0.000738	-0.000589	lbfgs	100	(5, 5)	tanh
72	72	0.000738	-0.000589	lbfgs	500	(5, 5)	tanh
73	72	0.000738	-0.000589	lbfgs	250	(5, 5)	tanh
74	75	0.000755	-0.000603	adam	100	(5, 5)	relu

Tabela 152: Hiperparâmetros: happy_data_mlp_m_x_1_err_i

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	75	0.000755	-0.000603	adam	250	(5, 5)	relu
76	75	0.000755	-0.000603	adam	500	(5, 5)	relu
77	78	0.000760	-0.000618	sgd	500	5	relu
78	78	0.000760	-0.000618	sgd	100	5	relu
79	78	0.000760	-0.000618	sgd	250	5	relu
80	81	0.010120	-0.004393	sgd	500	5	logistic
81	81	0.010120	-0.004393	sgd	100	5	logistic
82	81	0.010120	-0.004393	sgd	250	5	logistic
83	84	0.020158	-0.023079	adam	100	5	identity
84	84	0.020158	-0.023079	adam	500	5	identity
85	84	0.020158	-0.023079	adam	250	5	identity
86	87	0.192320	-0.068867	lbfgs	100	10	identity
87	88	0.156995	-0.069622	adam	250	10	relu
88	88	0.156995	-0.069622	adam	100	10	relu
89	88	0.156995	-0.069622	adam	500	10	relu
90	91	0.736675	-0.108007	lbfgs	250	10	logistic
91	92	1.053953	-0.151229	lbfgs	100	5	relu
92	93	0.169761	-0.230616	adam	500	(5, 5)	identity
93	93	0.169761	-0.230616	adam	250	(5, 5)	identity
94	93	0.169761	-0.230616	adam	100	(5, 5)	identity
95	96	0.745010	-0.265890	lbfgs	500	10	logistic
96	97	0.297364	-0.294986	adam	500	10	identity
97	97	0.297364	-0.294986	adam	100	10	identity
98	97	0.297364	-0.294986	adam	250	10	identity
99	100	NaN	NaN	sgd	500	(5, 5)	identity

Tabela 153: Hiperparâmetros: happy_data_mlp_m_x_1_err_z

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.047790	0.266484	lbfgs	250	5	logistic
1	1	0.047790	0.266484	lbfgs	500	5	logistic
2	3	0.089572	0.241183	lbfgs	250	5	relu
3	3	0.089572	0.241183	lbfgs	500	5	relu
4	5	0.080922	0.229682	lbfgs	100	10	logistic
5	6	0.067097	0.228201	lbfgs	250	10	logistic
6	7	0.131747	0.223222	adam	100	5	relu
7	7	0.131747	0.223222	adam	250	5	relu
8	7	0.131747	0.223222	adam	500	5	relu
9	10	0.082023	0.216429	lbfgs	100	5	relu
10	11	0.122129	0.204314	lbfgs	500	(5, 5)	tanh
11	12	0.065569	0.200283	lbfgs	100	5	logistic
12	13	0.123543	0.197241	lbfgs	250	(5, 5)	tanh
13	14	0.063522	0.195978	adam	250	5	tanh
14	14	0.063522	0.195978	adam	100	5	tanh
15	14	0.063522	0.195978	adam	500	5	tanh
16	17	0.121274	0.190365	lbfgs	100	(5, 5)	tanh
17	18	0.121099	0.187670	lbfgs	250	10	tanh
18	18	0.121099	0.187670	lbfgs	500	10	tanh
19	20	0.120213	0.175075	lbfgs	100	10	tanh
20	21	0.124231	0.165477	lbfgs	500	10	relu
21	21	0.124231	0.165477	lbfgs	250	10	relu
22	23	0.121058	0.156303	lbfgs	500	10	logistic
23	24	0.121887	0.147871	lbfgs	100	(5, 5)	identity
24	25	0.123710	0.147481	lbfgs	250	10	identity

Tabela 154: Hiperparâmetros: happy_data_mlp_m_x_l_err_z

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	25	0.123710	0.147481	lbfgs	500	10	identity
26	27	0.126472	0.146149	lbfgs	500	5	identity
27	27	0.126472	0.146149	lbfgs	250	5	identity
28	29	0.126165	0.146028	lbfgs	250	(5, 5)	identity
29	29	0.126165	0.146028	lbfgs	500	(5, 5)	identity
30	31	0.128282	0.144617	lbfgs	100	5	identity
31	32	0.130082	0.139119	lbfgs	100	10	relu
32	33	0.122333	0.129469	lbfgs	100	10	identity
33	34	0.071871	0.125039	adam	500	10	tanh
34	34	0.071871	0.125039	adam	100	10	tanh
35	34	0.071871	0.125039	adam	250	10	tanh
36	37	0.029714	0.088229	adam	250	10	logistic
37	37	0.029714	0.088229	adam	500	10	logistic
38	37	0.029714	0.088229	adam	100	10	logistic
39	40	0.102920	0.084742	adam	250	10	relu
40	40	0.102920	0.084742	adam	500	10	relu
41	40	0.102920	0.084742	adam	100	10	relu
42	43	0.026520	0.083947	adam	100	5	logistic
43	43	0.026520	0.083947	adam	500	5	logistic
44	43	0.026520	0.083947	adam	250	5	logistic
45	46	0.180623	0.077914	adam	100	(5, 5)	identity
46	46	0.180623	0.077914	adam	250	(5, 5)	identity
47	46	0.180623	0.077914	adam	500	(5, 5)	identity
48	49	0.034011	0.025309	adam	500	(5, 5)	tanh
49	49	0.034011	0.025309	adam	250	(5, 5)	tanh

Tabela 155: Hiperparâmetros: happy_data_mlp_m_x_1_err_z

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	49	0.034011	0.025309	adam	100	(5, 5)	tanh
51	52	0.030126	0.017720	sgd	250	(5, 5)	tanh
52	52	0.030126	0.017720	sgd	500	(5, 5)	tanh
53	52	0.030126	0.017720	sgd	100	(5, 5)	tanh
54	55	0.002160	0.002840	sgd	100	10	logistic
55	55	0.002160	0.002840	sgd	250	10	logistic
56	55	0.002160	0.002840	sgd	500	10	logistic
57	58	0.001954	0.002040	sgd	500	10	tanh
58	58	0.001954	0.002040	sgd	250	10	tanh
59	58	0.001954	0.002040	sgd	100	10	tanh
60	61	0.000201	-0.000177	sgd	250	10	relu
61	61	0.000201	-0.000177	sgd	500	10	relu
62	61	0.000201	-0.000177	sgd	100	10	relu
63	64	0.000209	-0.000181	sgd	500	(5, 5)	logistic
64	64	0.000209	-0.000181	sgd	100	(5, 5)	logistic
65	64	0.000209	-0.000181	sgd	250	(5, 5)	logistic
66	67	0.000319	-0.000236	lbfgs	250	(5, 5)	logistic
67	67	0.000319	-0.000236	lbfgs	500	(5, 5)	logistic
68	67	0.000319	-0.000236	lbfgs	100	(5, 5)	logistic
69	70	0.000320	-0.000239	lbfgs	500	5	tanh
70	70	0.000320	-0.000239	lbfgs	250	5	tanh
71	70	0.000320	-0.000239	lbfgs	100	5	tanh
72	73	0.000321	-0.000240	lbfgs	250	(5, 5)	relu
73	73	0.000321	-0.000240	lbfgs	500	(5, 5)	relu
74	73	0.000321	-0.000240	lbfgs	100	(5, 5)	relu

Tabela 156: Hiperparâmetros: happy_data_mlp_m_x_1_err_z

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	76	0.000343	-0.000264	sgd	500	5	relu
76	76	0.000343	-0.000264	sgd	250	5	relu
77	76	0.000343	-0.000264	sgd	100	5	relu
78	79	0.000357	-0.000306	adam	100	(5, 5)	relu
79	79	0.000357	-0.000306	adam	250	(5, 5)	relu
80	79	0.000357	-0.000306	adam	500	(5, 5)	relu
81	82	0.000321	-0.000399	sgd	250	5	tanh
82	82	0.000321	-0.000399	sgd	100	5	tanh
83	82	0.000321	-0.000399	sgd	500	5	tanh
84	85	0.000359	-0.000529	adam	100	(5, 5)	logistic
85	85	0.000359	-0.000529	adam	500	(5, 5)	logistic
86	85	0.000359	-0.000529	adam	250	(5, 5)	logistic
87	88	0.001016	-0.000600	sgd	250	(5, 5)	relu
88	88	0.001016	-0.000600	sgd	100	(5, 5)	relu
89	88	0.001016	-0.000600	sgd	500	(5, 5)	relu
90	91	0.005630	-0.001997	sgd	500	5	logistic
91	91	0.005630	-0.001997	sgd	250	5	logistic
92	91	0.005630	-0.001997	sgd	100	5	logistic
93	94	0.147135	-0.046896	adam	100	5	identity
94	94	0.147135	-0.046896	adam	250	5	identity
95	94	0.147135	-0.046896	adam	500	5	identity
96	97	0.175370	-0.099291	adam	100	10	identity
97	97	0.175370	-0.099291	adam	500	10	identity
98	97	0.175370	-0.099291	adam	250	10	identity
99	100	NaN	NaN	sgd	100	10	identity

Tabela 157: Hiperparâmetros: happy_data_rf_m_x_1_err_u

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.005957	0.837074	squared_error
2	0.006158	0.836966	poisson
3	0.005853	0.836864	absolute_error

Tabela 158: Hiperparâmetros: happy_data_rf_m_x_1_err_g

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.263729	0.621663	poisson
2	0.368288	0.454569	squared_error
3	0.376440	0.451984	absolute_error

Tabela 159: Hiperparâmetros: happy_data_rf_m_x_1_err_r

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.172459	0.694130	absolute_error
2	0.184914	0.686285	squared_error
3	0.182232	0.672864	poisson

Tabela 160: Hiperparâmetros: happy_data_rf_m_x_1_err_i

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.387944	0.460206	poisson
2	0.368752	0.423116	squared_error
3	0.338316	0.347471	absolute_error

Tabela 161: Hiperparâmetros: happy_data_rf_m_x_1_err_z

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.098259	0.658001	absolute_error
2	0.099899	0.644139	squared_error
3	0.100908	0.642188	poisson

Tabela 162: Hiperparâmetros: happy_data_xgb_m_x_1_err_u

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.007787	0.838072	reg:squarederror	5
2	0.005697	0.829078	reg:squarederror	10
3	0.006567	0.798460	reg:squarederror	1

Tabela 163: Hiperparâmetros: happy_data_xgb_m_x_1_err_g

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.887891	0.169049	reg:squarederror	5
2	1.029647	0.112765	reg:squarederror	10
3	0.801602	0.043129	reg:squarederror	1

Tabela 164: Hiperparâmetros: happy_data_xgb_m_x_1_err_r

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.195155	0.669409	reg:squarederror	5
2	0.195232	0.662097	reg:squarederror	10
3	0.179642	0.601867	reg:squarederror	1

Tabela 165: Hiperparâmetros: happy_data_xgb_m_x_1_err_i

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.260835	0.447866	reg:squarederror	1
2	0.447138	0.382059	reg:squarederror	5
3	0.500442	0.332239	reg:squarederror	10

Tabela 166: Hiperparâmetros: happy_data_xgb_m_x_1_err_z

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.082733	0.619214	reg:squarederror	5
2	0.111695	0.590368	reg:squarederror	10
3	0.104822	0.505707	reg:squarederror	1

Tabela 167: Hiperparâmetros: happy_data_dt_1_x_1_u_err_u

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.008005	0.759621	best	5	squared_error
1	0.008005	0.759621	best	5	friedman_mse
3	0.009251	0.756246	best	5	poisson
4	0.010796	0.756224	random	10	poisson
4	0.010796	0.756224	random	10	squared_error
4	0.010796	0.756224	random	10	friedman_mse
7	0.010604	0.752609	best	10	poisson
8	0.011523	0.750584	best	10	squared_error
8	0.011523	0.750584	best	10	friedman_mse
10	0.008491	0.750559	best	10	absolute_error
11	0.005925	0.750539	random	15	friedman_mse
11	0.005925	0.750539	random	15	squared_error
11	0.005925	0.750539	random	15	poisson
14	0.007695	0.748861	best	5	absolute_error
15	0.011279	0.747088	random	10	absolute_error
16	0.006817	0.743182	random	15	absolute_error
17	0.008516	0.729976	best	15	absolute_error
18	0.007320	0.723627	best	15	poisson
19	0.008189	0.718867	best	15	squared_error
19	0.008189	0.718867	best	15	friedman_mse
21	0.269520	0.301810	random	5	friedman_mse
21	0.269520	0.301810	random	5	poisson
21	0.269520	0.301810	random	5	squared_error
24	0.282864	0.273932	random	5	absolute_error

Tabela 168: Hiperparâmetros: happy_data_dt_1_x_1_g_err_g

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.975647	0.079386	best	5	absolute_error
2	0.958347	0.070254	random	10	poisson
2	0.958347	0.070254	random	10	squared_error
2	0.958347	0.070254	random	10	friedman_mse
5	0.984670	0.064403	best	5	squared_error
5	0.984670	0.064403	best	5	friedman_mse
7	0.963789	0.061585	random	10	absolute_error
8	0.976164	0.053839	best	5	poisson
9	1.172614	-0.016858	best	10	absolute_error
10	1.165218	-0.022655	random	15	absolute_error
11	1.156570	-0.025196	random	15	friedman_mse
11	1.156570	-0.025196	random	15	squared_error
11	1.156570	-0.025196	random	15	poisson
14	1.133359	-0.080336	random	5	friedman_mse
14	1.133359	-0.080336	random	5	poisson
14	1.133359	-0.080336	random	5	squared_error
17	1.133925	-0.098365	random	5	absolute_error
18	1.098318	-0.132562	best	10	friedman_mse
18	1.098318	-0.132562	best	10	squared_error
20	1.118055	-0.139483	best	15	absolute_error
21	1.091911	-0.146387	best	10	poisson
22	1.089519	-0.169853	best	15	squared_error
22	1.089519	-0.169853	best	15	friedman_mse
24	1.089541	-0.175675	best	15	poisson

Tabela 169: Hiperparâmetros: happy_data_dt_1_x_1_r_err_r

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.201686	0.647562	best	5	squared_error
1	0.201686	0.647562	best	5	friedman_mse
3	0.223265	0.636412	best	5	absolute_error
4	0.217208	0.620182	best	10	absolute_error
5	0.186188	0.611881	best	5	poisson
6	0.206598	0.611277	best	15	absolute_error
7	0.205075	0.602463	best	10	poisson
8	0.201628	0.594038	best	15	squared_error
8	0.201628	0.594038	best	15	friedman_mse
10	0.195192	0.591941	best	10	squared_error
10	0.195192	0.591941	best	10	friedman_mse
12	0.200918	0.591806	best	15	poisson
13	0.232843	0.546124	random	15	friedman_mse
13	0.232843	0.546124	random	15	squared_error
13	0.232843	0.546124	random	15	poisson
16	0.232965	0.544306	random	15	absolute_error
17	0.227264	0.494758	random	10	absolute_error
18	0.223610	0.468042	random	10	squared_error
18	0.223610	0.468042	random	10	poisson
18	0.223610	0.468042	random	10	friedman_mse
21	0.125026	0.234888	random	5	friedman_mse
21	0.125026	0.234888	random	5	poisson
21	0.125026	0.234888	random	5	squared_error
24	0.096175	0.195683	random	5	absolute_error

Tabela 170: Hiperparâmetros: happy_data_dt_1_x_1_i_err_i

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.304600	0.525592	best	5	absolute_error
2	0.523174	0.371102	random	10	poisson
2	0.523174	0.371102	random	10	squared_error
2	0.523174	0.371102	random	10	friedman_mse
5	0.525923	0.370349	random	10	absolute_error
6	0.469822	0.246382	best	5	squared_error
6	0.469822	0.246382	best	5	friedman_mse
8	0.542082	0.183826	best	5	poisson
9	0.630107	0.128127	random	15	absolute_error
10	0.619160	0.127453	best	10	absolute_error
11	0.624709	0.124212	random	15	friedman_mse
11	0.624709	0.124212	random	15	squared_error
11	0.624709	0.124212	random	15	poisson
14	0.331352	0.088342	random	5	absolute_error
15	0.594455	0.071148	best	10	friedman_mse
15	0.594455	0.071148	best	10	squared_error
17	0.597345	0.064250	best	15	absolute_error
18	0.634971	0.037977	best	10	poisson
19	0.479594	0.033925	random	5	friedman_mse
19	0.479594	0.033925	random	5	poisson
19	0.479594	0.033925	random	5	squared_error
22	0.660293	0.003114	best	15	squared_error
22	0.660293	0.003114	best	15	friedman_mse
24	0.658496	0.002116	best	15	poisson

Tabela 171: Hiperparâmetros: happy_data_dt_1_x_1_z_err_z

rank_test_score	std_test_score	mean_test_score	param_splitter	param_max_depth	param_criterion
1	0.057812	0.445068	random	5	squared_error
1	0.057812	0.445068	random	5	poisson
1	0.057812	0.445068	random	5	friedman_mse
4	0.250586	0.428441	best	10	absolute_error
5	0.277865	0.426845	random	10	poisson
5	0.277865	0.426845	random	10	squared_error
5	0.277865	0.426845	random	10	friedman_mse
8	0.272435	0.419319	random	10	absolute_error
9	0.081019	0.417421	random	5	absolute_error
10	0.117277	0.385296	best	5	absolute_error
11	0.203033	0.356956	best	5	poisson
12	0.218742	0.318013	best	5	squared_error
12	0.218742	0.318013	best	5	friedman_mse
14	0.282334	0.287828	random	15	friedman_mse
14	0.282334	0.287828	random	15	squared_error
14	0.282334	0.287828	random	15	poisson
17	0.283200	0.280801	random	15	absolute_error
18	0.289355	0.257580	best	15	absolute_error
19	0.342390	0.244731	best	10	poisson
20	0.356587	0.240341	best	10	friedman_mse
20	0.356587	0.240341	best	10	squared_error
22	0.364099	0.203003	best	15	friedman_mse
22	0.364099	0.203003	best	15	squared_error
24	0.358941	0.196436	best	15	poisson

Tabela 172: Hiperparâmetros: happy_data_knn_1_x_1_u_err_u

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.006647	0.740384	uniform	2	10	brute
1	2	0.006641	0.740381	uniform	1	10	brute
2	2	0.006641	0.740381	uniform	3	10	brute
3	4	0.006627	0.740378	uniform	3	10	ball_tree
4	4	0.006627	0.740378	uniform	2	10	ball_tree
5	4	0.006627	0.740378	uniform	1	10	ball_tree
6	7	0.006631	0.740372	uniform	1	10	kd_tree
7	7	0.006631	0.740372	uniform	3	10	kd_tree
8	7	0.006631	0.740372	uniform	2	10	kd_tree
9	10	0.005108	0.716341	uniform	3	5	ball_tree
10	10	0.005108	0.716341	uniform	1	5	ball_tree
11	10	0.005108	0.716341	uniform	2	5	ball_tree
12	13	0.005082	0.716329	uniform	3	5	kd_tree
13	13	0.005082	0.716329	uniform	2	5	kd_tree
14	13	0.005082	0.716329	uniform	1	5	kd_tree
15	16	0.005156	0.716202	uniform	2	5	brute
16	17	0.005131	0.716195	uniform	1	5	brute
17	17	0.005131	0.716195	uniform	3	5	brute
18	19	0.009485	0.699392	distance	2	10	ball_tree
19	19	0.009485	0.699392	distance	3	10	ball_tree
20	19	0.009485	0.699392	distance	1	10	ball_tree
21	22	0.009485	0.699392	distance	1	10	brute
22	22	0.009485	0.699392	distance	3	10	brute
23	24	0.009484	0.699391	distance	3	10	kd_tree
24	24	0.009484	0.699391	distance	2	10	kd_tree

Tabela 173: Hiperparâmetros: happy_data_knn_1_x_1_u_err_u

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	24	0.009484	0.699391	distance	1	10	kd_tree
26	27	0.009484	0.699390	distance	2	10	brute
27	28	0.009444	0.678736	distance	1	5	kd_tree
28	28	0.009444	0.678736	distance	2	5	kd_tree
29	28	0.009444	0.678736	distance	3	5	kd_tree
30	31	0.009455	0.678734	distance	2	5	ball_tree
31	31	0.009455	0.678734	distance	1	5	ball_tree
32	31	0.009455	0.678734	distance	3	5	ball_tree
33	34	0.009469	0.678649	distance	2	5	brute
34	35	0.009464	0.678646	distance	3	5	brute
35	35	0.009464	0.678646	distance	1	5	brute
36	37	0.015322	0.535229	distance	2	1	brute
37	37	0.015322	0.535229	uniform	2	1	brute
38	39	0.015059	0.534907	uniform	1	1	brute
39	39	0.015059	0.534907	distance	1	1	brute
40	39	0.015059	0.534907	uniform	3	1	brute
41	39	0.015059	0.534907	distance	3	1	brute
42	43	0.014895	0.534573	uniform	3	1	ball_tree
43	43	0.014895	0.534573	uniform	2	1	ball_tree
44	43	0.014895	0.534573	distance	1	1	ball_tree
45	43	0.014895	0.534573	distance	2	1	ball_tree
46	43	0.014895	0.534573	distance	3	1	kd_tree
47	43	0.014895	0.534573	uniform	3	1	kd_tree
48	43	0.014895	0.534573	uniform	1	1	kd_tree
49	43	0.014895	0.534573	distance	1	1	kd_tree

Tabela 174: Hiperparâmetros: happy_data_knn_1_x_1_g_err_g

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.220939	0.521469	uniform	1	10	brute
1	1	0.220939	0.521469	uniform	3	10	brute
2	3	0.220934	0.521466	uniform	2	10	brute
3	4	0.220939	0.521466	uniform	3	10	ball_tree
4	4	0.220939	0.521466	uniform	2	10	ball_tree
5	4	0.220939	0.521466	uniform	1	10	ball_tree
6	7	0.220931	0.521460	uniform	1	10	kd_tree
7	7	0.220931	0.521460	uniform	2	10	kd_tree
8	7	0.220931	0.521460	uniform	3	10	kd_tree
9	10	0.186819	0.482179	uniform	3	5	ball_tree
10	10	0.186819	0.482179	uniform	2	5	ball_tree
11	10	0.186819	0.482179	uniform	1	5	ball_tree
12	13	0.186799	0.482177	uniform	1	5	brute
13	13	0.186799	0.482177	uniform	3	5	brute
14	15	0.186802	0.482169	uniform	2	5	brute
15	16	0.186791	0.482147	uniform	3	5	kd_tree
16	16	0.186791	0.482147	uniform	2	5	kd_tree
17	16	0.186791	0.482147	uniform	1	5	kd_tree
18	19	0.200732	0.413856	distance	3	10	ball_tree
19	20	0.200732	0.413856	distance	2	10	ball_tree
20	20	0.200732	0.413856	distance	1	10	ball_tree
21	22	0.200732	0.413856	distance	1	10	kd_tree
22	22	0.200732	0.413856	distance	3	10	kd_tree
23	22	0.200732	0.413856	distance	2	10	kd_tree
24	25	0.200728	0.413855	distance	3	10	brute

Tabela 175: Hiperparâmetros: happy_data_knn_1_x_1_g_err_g

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	26	0.200728	0.413855	distance	1	10	brute
26	27	0.200728	0.413854	distance	2	10	brute
27	28	0.175932	0.363944	distance	3	5	brute
28	29	0.175932	0.363944	distance	1	5	brute
29	30	0.175923	0.363937	distance	2	5	brute
30	31	0.175937	0.363935	distance	3	5	ball_tree
31	31	0.175937	0.363935	distance	2	5	ball_tree
32	31	0.175937	0.363935	distance	1	5	ball_tree
33	34	0.175941	0.363929	distance	1	5	kd_tree
34	34	0.175941	0.363929	distance	2	5	kd_tree
35	34	0.175941	0.363929	distance	3	5	kd_tree
36	37	1.093896	-0.227650	uniform	2	1	brute
37	37	1.093896	-0.227650	distance	2	1	brute
38	39	1.093732	-0.227712	uniform	1	1	brute
39	39	1.093732	-0.227712	uniform	3	1	brute
40	39	1.093732	-0.227712	distance	1	1	brute
41	42	1.093732	-0.227712	distance	3	1	brute
42	43	1.093497	-0.228398	distance	3	1	kd_tree
43	43	1.093497	-0.228398	uniform	1	1	kd_tree
44	43	1.093497	-0.228398	distance	1	1	kd_tree
45	43	1.093497	-0.228398	uniform	2	1	kd_tree
46	43	1.093497	-0.228398	distance	2	1	kd_tree
47	43	1.093497	-0.228398	uniform	3	1	kd_tree
48	49	1.093496	-0.228400	distance	3	1	ball_tree
49	49	1.093496	-0.228400	uniform	3	1	ball_tree

Tabela 176: Hiperparâmetros: happy_data_knn_1_x_1_r_err_r

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.206514	0.632138	distance	3	10	brute
1	1	0.206514	0.632138	distance	1	10	brute
2	3	0.206513	0.632137	distance	2	10	brute
3	4	0.206509	0.632137	distance	3	10	ball_tree
4	4	0.206509	0.632137	distance	2	10	ball_tree
5	4	0.206509	0.632137	distance	1	10	ball_tree
6	7	0.206509	0.632135	distance	2	10	kd_tree
7	7	0.206509	0.632135	distance	3	10	kd_tree
8	7	0.206509	0.632135	distance	1	10	kd_tree
9	10	0.212628	0.628572	uniform	1	10	brute
10	10	0.212628	0.628572	uniform	3	10	brute
11	12	0.212625	0.628570	uniform	2	10	brute
12	13	0.212608	0.628570	uniform	2	10	ball_tree
13	13	0.212608	0.628570	uniform	3	10	ball_tree
14	13	0.212608	0.628570	uniform	1	10	ball_tree
15	16	0.212610	0.628563	uniform	2	10	kd_tree
16	16	0.212610	0.628563	uniform	1	10	kd_tree
17	16	0.212610	0.628563	uniform	3	10	kd_tree
18	19	0.201488	0.626519	distance	2	5	brute
19	20	0.201477	0.626511	distance	3	5	ball_tree
20	20	0.201477	0.626511	distance	2	5	ball_tree
21	20	0.201477	0.626511	distance	1	5	ball_tree
22	23	0.201480	0.626505	distance	1	5	brute
23	23	0.201480	0.626505	distance	3	5	brute
24	25	0.201472	0.626501	distance	1	5	kd_tree

Tabela 177: Hiperparâmetros: happy_data_knn_1_x_1_r_err_r

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	25	0.201472	0.626501	distance	2	5	kd_tree
26	25	0.201472	0.626501	distance	3	5	kd_tree
27	28	0.190941	0.600587	uniform	2	5	ball_tree
28	28	0.190941	0.600587	uniform	1	5	ball_tree
29	28	0.190941	0.600587	uniform	3	5	ball_tree
30	31	0.190955	0.600586	uniform	2	5	brute
31	32	0.190945	0.600571	uniform	1	5	brute
32	32	0.190945	0.600571	uniform	3	5	brute
33	34	0.190918	0.600562	uniform	2	5	kd_tree
34	34	0.190918	0.600562	uniform	1	5	kd_tree
35	34	0.190918	0.600562	uniform	3	5	kd_tree
36	37	0.189192	0.526991	uniform	1	1	kd_tree
37	37	0.189192	0.526991	distance	1	1	kd_tree
38	37	0.189192	0.526991	uniform	2	1	kd_tree
39	37	0.189192	0.526991	uniform	3	1	kd_tree
40	37	0.189192	0.526991	distance	2	1	kd_tree
41	37	0.189192	0.526991	distance	3	1	kd_tree
42	43	0.189188	0.526978	distance	3	1	ball_tree
43	43	0.189188	0.526978	uniform	3	1	ball_tree
44	43	0.189188	0.526978	distance	2	1	ball_tree
45	43	0.189188	0.526978	uniform	2	1	ball_tree
46	43	0.189188	0.526978	distance	1	1	ball_tree
47	43	0.189188	0.526978	uniform	1	1	ball_tree
48	49	0.189151	0.526882	distance	3	1	brute
49	49	0.189151	0.526882	distance	1	1	brute

Tabela 178: Hiperparâmetros: happy_data_knn_1_x_1_i_err_i

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.244158	0.379550	uniform	1	10	kd_tree
1	1	0.244158	0.379550	uniform	2	10	kd_tree
2	1	0.244158	0.379550	uniform	3	10	kd_tree
3	4	0.244150	0.379530	uniform	2	10	brute
4	5	0.244190	0.379517	uniform	1	10	ball_tree
5	5	0.244190	0.379517	uniform	3	10	ball_tree
6	5	0.244190	0.379517	uniform	2	10	ball_tree
7	8	0.244216	0.379499	uniform	3	10	brute
8	8	0.244216	0.379499	uniform	1	10	brute
9	10	0.315187	0.363025	distance	1	10	kd_tree
10	10	0.315187	0.363025	distance	3	10	kd_tree
11	10	0.315187	0.363025	distance	2	10	kd_tree
12	13	0.315198	0.363017	distance	1	10	ball_tree
13	13	0.315198	0.363017	distance	2	10	ball_tree
14	13	0.315198	0.363017	distance	3	10	ball_tree
15	16	0.315211	0.363010	distance	1	10	brute
16	17	0.315211	0.363010	distance	3	10	brute
17	18	0.315201	0.363007	distance	2	10	brute
18	19	0.350386	0.302740	uniform	3	5	brute
19	19	0.350386	0.302740	uniform	1	5	brute
20	21	0.350464	0.302723	uniform	1	5	ball_tree
21	21	0.350464	0.302723	uniform	3	5	ball_tree
22	21	0.350464	0.302723	uniform	2	5	ball_tree
23	24	0.350431	0.302720	uniform	2	5	brute
24	25	0.350486	0.302709	uniform	3	5	kd_tree

Tabela 179: Hiperparâmetros: happy_data_knn_1_x_1_i_err_i

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	25	0.350486	0.302709	uniform	2	5	kd_tree
26	25	0.350486	0.302709	uniform	1	5	kd_tree
27	28	0.441940	0.289538	distance	3	5	ball_tree
28	29	0.441940	0.289538	distance	1	5	ball_tree
29	29	0.441940	0.289538	distance	2	5	ball_tree
30	31	0.441944	0.289534	distance	3	5	kd_tree
31	32	0.441944	0.289534	distance	2	5	kd_tree
32	32	0.441944	0.289534	distance	1	5	kd_tree
33	34	0.441918	0.289534	distance	3	5	brute
34	35	0.441918	0.289534	distance	1	5	brute
35	36	0.441926	0.289519	distance	2	5	brute
36	37	0.754985	-0.116729	distance	2	1	brute
37	38	0.754985	-0.116729	uniform	2	1	brute
38	39	0.755034	-0.117514	distance	1	1	brute
39	39	0.755034	-0.117514	uniform	3	1	brute
40	39	0.755034	-0.117514	distance	3	1	brute
41	39	0.755034	-0.117514	uniform	1	1	brute
42	43	0.755219	-0.117835	distance	3	1	kd_tree
43	44	0.755219	-0.117835	distance	2	1	kd_tree
44	44	0.755219	-0.117835	uniform	3	1	kd_tree
45	44	0.755219	-0.117835	distance	1	1	kd_tree
46	44	0.755219	-0.117835	uniform	1	1	kd_tree
47	44	0.755219	-0.117835	uniform	2	1	kd_tree
48	49	0.755453	-0.117985	distance	3	1	ball_tree
49	50	0.755453	-0.117985	uniform	3	1	ball_tree

Tabela 180: Hiperparâmetros: happy_data_knn_1_x_1_z_err_z

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
0	1	0.060605	0.496502	uniform	1	10	ball_tree
1	1	0.060605	0.496502	uniform	3	10	ball_tree
2	1	0.060605	0.496502	uniform	2	10	ball_tree
3	4	0.060599	0.496498	uniform	1	10	kd_tree
4	4	0.060599	0.496498	uniform	2	10	kd_tree
5	4	0.060599	0.496498	uniform	3	10	kd_tree
6	7	0.060593	0.496498	uniform	2	10	brute
7	8	0.060582	0.496483	uniform	3	10	brute
8	8	0.060582	0.496483	uniform	1	10	brute
9	10	0.075844	0.422281	uniform	2	5	brute
10	11	0.075807	0.422277	uniform	2	5	ball_tree
11	11	0.075807	0.422277	uniform	3	5	ball_tree
12	11	0.075807	0.422277	uniform	1	5	ball_tree
13	14	0.075857	0.422274	uniform	3	5	brute
14	14	0.075857	0.422274	uniform	1	5	brute
15	16	0.075809	0.422262	uniform	1	5	kd_tree
16	16	0.075809	0.422262	uniform	3	5	kd_tree
17	16	0.075809	0.422262	uniform	2	5	kd_tree
18	19	0.156427	0.397251	distance	3	10	kd_tree
19	19	0.156427	0.397251	distance	2	10	kd_tree
20	19	0.156427	0.397251	distance	1	10	kd_tree
21	22	0.156426	0.397250	distance	2	10	ball_tree
22	22	0.156426	0.397250	distance	3	10	ball_tree
23	22	0.156426	0.397250	distance	1	10	ball_tree
24	25	0.156431	0.397246	distance	2	10	brute

Tabela 181: Hiperparâmetros: happy_data_knn_1_x_1_z_err_z

	rank_test_score	std_test_score	mean_test_score	param_weights	param_p	param_n_neighbors	param_algorithm
25	26	0.156426	0.397244	distance	1	10	brute
26	26	0.156426	0.397244	distance	3	10	brute
27	28	0.221795	0.325163	distance	3	5	brute
28	28	0.221795	0.325163	distance	1	5	brute
29	30	0.221797	0.325162	distance	2	5	brute
30	31	0.221786	0.325161	distance	3	5	ball_tree
31	32	0.221786	0.325161	distance	1	5	ball_tree
32	32	0.221786	0.325161	distance	2	5	ball_tree
33	34	0.221793	0.325150	distance	2	5	kd_tree
34	34	0.221793	0.325150	distance	3	5	kd_tree
35	34	0.221793	0.325150	distance	1	5	kd_tree
36	37	0.401886	0.059589	distance	3	1	brute
37	37	0.401886	0.059589	distance	1	1	brute
38	39	0.401886	0.059589	uniform	3	1	brute
39	39	0.401886	0.059589	uniform	1	1	brute
40	41	0.401891	0.059547	distance	2	1	brute
41	41	0.401891	0.059547	uniform	2	1	brute
42	43	0.401817	0.059527	distance	1	1	kd_tree
43	43	0.401817	0.059527	distance	2	1	kd_tree
44	45	0.401817	0.059527	uniform	1	1	kd_tree
45	45	0.401817	0.059527	uniform	2	1	kd_tree
46	45	0.401817	0.059527	uniform	3	1	kd_tree
47	45	0.401817	0.059527	distance	3	1	kd_tree
48	49	0.401815	0.059525	distance	2	1	ball_tree
49	49	0.401815	0.059525	distance	1	1	ball_tree

Tabela 182: Hiperparâmetros: happy_data_mlp_1_x_1_u_err_u

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.008273	0.757497	lbfgs	500	(5, 5)	relu
1	2	0.012686	0.753197	lbfgs	250	(5, 5)	relu
2	3	0.042680	0.709672	lbfgs	500	(5, 5)	tanh
3	4	0.039127	0.706682	lbfgs	250	(5, 5)	tanh
4	5	0.090532	0.695268	lbfgs	500	5	logistic
5	6	0.084031	0.677770	lbfgs	250	5	logistic
6	7	0.056372	0.677730	lbfgs	100	(5, 5)	relu
7	8	0.112107	0.670605	lbfgs	500	(5, 5)	logistic
8	9	0.071003	0.645601	lbfgs	100	(5, 5)	tanh
9	10	0.087294	0.631520	lbfgs	250	(5, 5)	logistic
10	11	0.110189	0.625586	lbfgs	500	10	tanh
11	12	0.106718	0.622745	lbfgs	250	10	tanh
12	13	0.085321	0.602495	lbfgs	500	5	tanh
13	14	0.060995	0.599911	adam	500	(5, 5)	relu
14	14	0.060995	0.599911	adam	250	(5, 5)	relu
15	16	0.067510	0.591300	lbfgs	250	5	tanh
16	17	0.048118	0.583055	adam	100	(5, 5)	relu
17	18	0.081526	0.574016	adam	250	10	relu
18	18	0.081526	0.574016	adam	500	10	relu
19	20	0.038904	0.571011	lbfgs	100	5	logistic
20	21	0.052291	0.569101	lbfgs	100	10	tanh
21	22	0.062292	0.564376	adam	100	10	relu
22	23	0.046855	0.561572	lbfgs	100	5	tanh
23	24	0.008820	0.559483	sgd	100	(5, 5)	relu
24	24	0.008820	0.559483	sgd	500	(5, 5)	relu

Tabela 183: Hiperparâmetros: happy_data_mlp_1_x_1_u_err_u

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	24	0.008820	0.559483	sgd	250	(5, 5)	relu
26	27	0.005408	0.548340	adam	250	(5, 5)	logistic
27	27	0.005408	0.548340	adam	100	(5, 5)	logistic
28	27	0.005408	0.548340	adam	500	(5, 5)	logistic
29	30	0.013487	0.542105	sgd	500	(5, 5)	tanh
30	30	0.013487	0.542105	sgd	250	(5, 5)	tanh
31	32	0.005614	0.539060	adam	250	10	tanh
32	32	0.005614	0.539060	adam	500	10	tanh
33	32	0.005614	0.539060	adam	100	10	tanh
34	35	0.004278	0.537689	adam	500	(5, 5)	tanh
35	35	0.004278	0.537689	adam	250	(5, 5)	tanh
36	35	0.004278	0.537689	adam	100	(5, 5)	tanh
37	38	0.005350	0.536972	lbfgs	100	(5, 5)	logistic
38	39	0.005950	0.535307	adam	100	5	logistic
39	39	0.005950	0.535307	adam	500	5	logistic
40	39	0.005950	0.535307	adam	250	5	logistic
41	42	0.004519	0.535143	adam	500	5	tanh
42	42	0.004519	0.535143	adam	100	5	tanh
43	42	0.004519	0.535143	adam	250	5	tanh
44	45	0.005878	0.533213	lbfgs	500	10	logistic
45	46	0.005841	0.533187	lbfgs	250	10	logistic
46	47	0.005716	0.533092	lbfgs	100	10	logistic
47	48	0.006009	0.532857	adam	500	10	logistic
48	48	0.006009	0.532857	adam	100	10	logistic
49	48	0.006009	0.532857	adam	250	10	logistic

Tabela 184: Hiperparâmetros: happy_data_mlp_1_x_1_u_err_u

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	51	0.005906	0.529077	lbfgs	250	10	relu
51	51	0.005906	0.529077	lbfgs	500	10	relu
52	51	0.005906	0.529077	lbfgs	100	10	relu
53	54	0.005906	0.529077	lbfgs	500	(5, 5)	identity
54	54	0.005906	0.529077	lbfgs	250	(5, 5)	identity
55	54	0.005906	0.529077	lbfgs	100	(5, 5)	identity
56	57	0.005906	0.529077	lbfgs	100	10	identity
57	57	0.005906	0.529077	lbfgs	250	10	identity
58	57	0.005906	0.529077	lbfgs	500	10	identity
59	60	0.005906	0.529077	lbfgs	500	5	identity
60	60	0.005906	0.529077	lbfgs	250	5	identity
61	60	0.005906	0.529077	lbfgs	100	5	identity
62	63	0.005905	0.529077	lbfgs	250	5	relu
63	63	0.005905	0.529077	lbfgs	100	5	relu
64	63	0.005905	0.529077	lbfgs	500	5	relu
65	66	0.005111	0.528334	sgd	250	5	logistic
66	66	0.005111	0.528334	sgd	500	5	logistic
67	68	0.007585	0.527732	sgd	250	10	tanh
68	68	0.007585	0.527732	sgd	100	10	tanh
69	68	0.007585	0.527732	sgd	500	10	tanh
70	71	0.006478	0.527239	adam	100	5	relu
71	71	0.006478	0.527239	adam	500	5	relu
72	71	0.006478	0.527239	adam	250	5	relu
73	74	0.004652	0.527230	sgd	500	5	identity
74	74	0.004652	0.527230	sgd	250	5	identity

Tabela 185: Hiperparâmetros: happy_data_mlp_1_x_1_u_err_u

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	74	0.004652	0.527230	sgd	100	5	identity
76	77	0.012259	0.527111	sgd	100	5	tanh
77	77	0.012259	0.527111	sgd	250	5	tanh
78	77	0.012259	0.527111	sgd	500	5	tanh
79	80	0.004923	0.524931	sgd	250	10	logistic
80	80	0.004923	0.524931	sgd	500	10	logistic
81	82	0.005943	0.523656	sgd	250	5	relu
82	82	0.005943	0.523656	sgd	500	5	relu
83	82	0.005943	0.523656	sgd	100	5	relu
84	85	0.005916	0.521303	adam	100	(5, 5)	identity
85	85	0.005916	0.521303	adam	250	(5, 5)	identity
86	85	0.005916	0.521303	adam	500	(5, 5)	identity
87	88	0.008166	0.519972	adam	500	10	identity
88	88	0.008166	0.519972	adam	250	10	identity
89	88	0.008166	0.519972	adam	100	10	identity
90	91	0.012360	0.519878	sgd	250	(5, 5)	identity
91	91	0.012360	0.519878	sgd	500	(5, 5)	identity
92	91	0.012360	0.519878	sgd	100	(5, 5)	identity
93	94	0.037821	0.519747	sgd	100	(5, 5)	tanh
94	95	0.013377	0.515442	adam	500	5	identity
95	95	0.013377	0.515442	adam	250	5	identity
96	95	0.013377	0.515442	adam	100	5	identity
97	98	0.005570	0.508656	sgd	100	10	logistic
98	99	0.006027	0.446009	sgd	100	5	logistic
99	100	0.000591	0.009258	sgd	100	(5, 5)	logistic

Tabela 186: Hiperparâmetros: happy_data_mlp_1_x_1_g_err_g

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.243141	0.499473	lbfgs	500	(5, 5)	tanh
1	2	0.237635	0.491708	lbfgs	250	(5, 5)	tanh
2	3	0.260415	0.475494	lbfgs	500	10	tanh
3	4	0.244048	0.467561	lbfgs	500	5	tanh
4	5	0.216880	0.464639	lbfgs	250	5	tanh
5	6	0.188862	0.458281	lbfgs	500	10	logistic
6	7	0.278575	0.456838	lbfgs	500	5	logistic
7	8	0.225978	0.456279	lbfgs	250	10	tanh
8	9	0.219490	0.410059	lbfgs	500	(5, 5)	logistic
9	10	0.197640	0.401361	lbfgs	250	5	logistic
10	11	0.211945	0.375866	lbfgs	100	(5, 5)	logistic
11	12	0.200861	0.375237	lbfgs	100	(5, 5)	tanh
12	13	0.309861	0.359639	lbfgs	250	(5, 5)	logistic
13	14	0.174508	0.351144	lbfgs	250	10	logistic
14	15	0.164880	0.308451	adam	100	10	tanh
15	15	0.164880	0.308451	adam	250	10	tanh
16	15	0.164880	0.308451	adam	500	10	tanh
17	18	0.161171	0.306779	adam	500	10	relu
18	18	0.161171	0.306779	adam	100	10	relu
19	18	0.161171	0.306779	adam	250	10	relu
20	21	0.164390	0.304633	adam	250	(5, 5)	tanh
21	21	0.164390	0.304633	adam	500	(5, 5)	tanh
22	21	0.164390	0.304633	adam	100	(5, 5)	tanh
23	24	0.160641	0.296140	lbfgs	100	10	tanh
24	25	0.157801	0.291908	lbfgs	100	5	logistic

Tabela 187: Hiperparâmetros: happy_data_mlp_1_x_1_g_err_g

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	26	0.157217	0.291480	lbfgs	100	5	tanh
26	27	0.157023	0.291040	lbfgs	100	5	identity
27	27	0.157023	0.291040	lbfgs	250	5	identity
28	27	0.157023	0.291040	lbfgs	500	5	identity
29	30	0.157019	0.291038	lbfgs	500	(5, 5)	identity
30	30	0.157019	0.291038	lbfgs	100	(5, 5)	identity
31	30	0.157019	0.291038	lbfgs	250	(5, 5)	identity
32	33	0.157020	0.291036	lbfgs	100	10	identity
33	33	0.157020	0.291036	lbfgs	250	10	identity
34	33	0.157020	0.291036	lbfgs	500	10	identity
35	36	0.157020	0.291036	lbfgs	500	(5, 5)	relu
36	36	0.157020	0.291036	lbfgs	250	(5, 5)	relu
37	36	0.157020	0.291036	lbfgs	100	(5, 5)	relu
38	39	0.157025	0.291035	lbfgs	250	10	relu
39	39	0.157025	0.291035	lbfgs	100	10	relu
40	39	0.157025	0.291035	lbfgs	500	10	relu
41	42	0.157030	0.291032	lbfgs	500	5	relu
42	42	0.157030	0.291032	lbfgs	100	5	relu
43	42	0.157030	0.291032	lbfgs	250	5	relu
44	45	0.155017	0.290921	lbfgs	100	10	logistic
45	46	0.156635	0.290256	sgd	250	5	relu
46	46	0.156635	0.290256	sgd	500	5	relu
47	46	0.156635	0.290256	sgd	100	5	relu
48	49	0.156700	0.289657	sgd	100	(5, 5)	identity
49	49	0.156700	0.289657	sgd	500	(5, 5)	identity

Tabela 188: Hiperparâmetros: happy_data_mlp_1_x_1_g_err_g

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	49	0.156700	0.289657	sgd	250	(5, 5)	identity
51	52	0.156366	0.289616	adam	100	(5, 5)	identity
52	52	0.156366	0.289616	adam	250	(5, 5)	identity
53	52	0.156366	0.289616	adam	500	(5, 5)	identity
54	55	0.151032	0.285607	adam	500	(5, 5)	logistic
55	55	0.151032	0.285607	adam	250	(5, 5)	logistic
56	55	0.151032	0.285607	adam	100	(5, 5)	logistic
57	58	0.154799	0.284703	adam	500	10	identity
58	58	0.154799	0.284703	adam	250	10	identity
59	58	0.154799	0.284703	adam	100	10	identity
60	61	0.144473	0.273081	sgd	500	5	identity
61	61	0.144473	0.273081	sgd	100	5	identity
62	61	0.144473	0.273081	sgd	250	5	identity
63	64	0.148277	0.272740	adam	100	10	logistic
64	64	0.148277	0.272740	adam	500	10	logistic
65	64	0.148277	0.272740	adam	250	10	logistic
66	67	0.147591	0.272282	adam	100	5	tanh
67	67	0.147591	0.272282	adam	250	5	tanh
68	67	0.147591	0.272282	adam	500	5	tanh
69	70	0.146088	0.271530	adam	100	5	logistic
70	70	0.146088	0.271530	adam	500	5	logistic
71	70	0.146088	0.271530	adam	250	5	logistic
72	73	0.136382	0.261883	sgd	500	(5, 5)	relu
73	73	0.136382	0.261883	sgd	100	(5, 5)	relu
74	73	0.136382	0.261883	sgd	250	(5, 5)	relu

Tabela 189: Hiperparâmetros: happy_data_mlp_1_x_1_g_err_g

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	76	0.129813	0.243973	adam	100	(5, 5)	relu
76	76	0.129813	0.243973	adam	250	(5, 5)	relu
77	76	0.129813	0.243973	adam	500	(5, 5)	relu
78	79	0.140185	0.222132	adam	250	5	relu
79	79	0.140185	0.222132	adam	100	5	relu
80	79	0.140185	0.222132	adam	500	5	relu
81	82	0.100469	0.188290	sgd	100	5	tanh
82	82	0.100469	0.188290	sgd	250	5	tanh
83	82	0.100469	0.188290	sgd	500	5	tanh
84	85	0.088155	0.166664	adam	100	5	identity
85	85	0.088155	0.166664	adam	250	5	identity
86	85	0.088155	0.166664	adam	500	5	identity
87	88	0.076667	0.144319	sgd	100	10	logistic
88	88	0.076667	0.144319	sgd	250	10	logistic
89	88	0.076667	0.144319	sgd	500	10	logistic
90	91	0.076593	0.142799	sgd	500	5	logistic
91	91	0.076593	0.142799	sgd	250	5	logistic
92	91	0.076593	0.142799	sgd	100	5	logistic
93	94	0.048351	0.090347	sgd	500	10	tanh
94	94	0.048351	0.090347	sgd	250	10	tanh
95	94	0.048351	0.090347	sgd	100	10	tanh
96	97	0.038608	0.073166	sgd	500	(5, 5)	tanh
97	97	0.038608	0.073166	sgd	100	(5, 5)	tanh
98	97	0.038608	0.073166	sgd	250	(5, 5)	tanh
99	100	0.003083	0.005686	sgd	100	(5, 5)	logistic

Tabela 190: Hiperparâmetros: happy_data_mlp_1_x_1_r_err_r

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.173437	0.404351	lbfgs	500	10	tanh
1	2	0.117896	0.364678	lbfgs	250	10	tanh
2	3	0.204766	0.362726	lbfgs	500	(5, 5)	tanh
3	4	0.197035	0.351221	lbfgs	250	(5, 5)	tanh
4	5	0.121266	0.297888	lbfgs	500	(5, 5)	logistic
5	6	0.102962	0.255469	lbfgs	250	(5, 5)	logistic
6	7	0.106881	0.235175	lbfgs	500	5	tanh
7	8	0.105615	0.212612	lbfgs	500	5	logistic
8	9	0.055293	0.184346	adam	500	10	relu
9	9	0.055293	0.184346	adam	250	10	relu
10	9	0.055293	0.184346	adam	100	10	relu
11	12	0.073991	0.172635	lbfgs	100	(5, 5)	tanh
12	13	0.046860	0.172364	lbfgs	250	5	logistic
13	14	0.055952	0.168214	lbfgs	250	5	tanh
14	15	0.052561	0.156748	lbfgs	100	(5, 5)	logistic
15	16	0.049455	0.152300	lbfgs	100	5	logistic
16	17	0.049520	0.151827	lbfgs	100	5	identity
17	17	0.049520	0.151827	lbfgs	250	5	identity
18	17	0.049520	0.151827	lbfgs	500	5	identity
19	20	0.049647	0.151726	lbfgs	100	5	relu
20	20	0.049647	0.151726	lbfgs	250	5	relu
21	20	0.049647	0.151726	lbfgs	500	5	relu
22	23	0.049612	0.151723	lbfgs	100	(5, 5)	identity
23	23	0.049612	0.151723	lbfgs	250	(5, 5)	identity
24	23	0.049612	0.151723	lbfgs	500	(5, 5)	identity

Tabela 191: Hiperparâmetros: happy_data_mlp_1_x_1_r_err_r

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	26	0.049614	0.151721	lbfgs	500	(5, 5)	relu
26	26	0.049614	0.151721	lbfgs	250	(5, 5)	relu
27	26	0.049614	0.151721	lbfgs	100	(5, 5)	relu
28	29	0.049614	0.151720	lbfgs	500	10	identity
29	29	0.049614	0.151720	lbfgs	250	10	identity
30	29	0.049614	0.151720	lbfgs	100	10	identity
31	32	0.048824	0.151312	lbfgs	500	10	relu
32	32	0.048824	0.151312	lbfgs	250	10	relu
33	32	0.048824	0.151312	lbfgs	100	10	relu
34	35	0.049785	0.150583	lbfgs	500	10	logistic
35	35	0.049785	0.150583	lbfgs	250	10	logistic
36	37	0.049475	0.150212	lbfgs	100	10	tanh
37	38	0.049397	0.149991	lbfgs	100	10	logistic
38	39	0.049991	0.149198	adam	250	5	tanh
39	39	0.049991	0.149198	adam	100	5	tanh
40	39	0.049991	0.149198	adam	500	5	tanh
41	42	0.048592	0.149117	lbfgs	100	5	tanh
42	43	0.046865	0.147663	adam	100	(5, 5)	identity
43	43	0.046865	0.147663	adam	500	(5, 5)	identity
44	43	0.046865	0.147663	adam	250	(5, 5)	identity
45	46	0.045565	0.147270	sgd	100	(5, 5)	identity
46	46	0.045565	0.147270	sgd	250	(5, 5)	identity
47	46	0.045565	0.147270	sgd	500	(5, 5)	identity
48	49	0.049807	0.147196	adam	500	10	logistic
49	49	0.049807	0.147196	adam	100	10	logistic

Tabela 192: Hiperparâmetros: happy_data_mlp_1_x_1_r_err_r

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	49	0.049807	0.147196	adam	250	10	logistic
51	52	0.049509	0.146617	adam	500	10	tanh
52	52	0.049509	0.146617	adam	250	10	tanh
53	52	0.049509	0.146617	adam	100	10	tanh
54	55	0.050604	0.145788	sgd	250	(5, 5)	relu
55	55	0.050604	0.145788	sgd	100	(5, 5)	relu
56	55	0.050604	0.145788	sgd	500	(5, 5)	relu
57	58	0.046117	0.145631	adam	500	(5, 5)	tanh
58	58	0.046117	0.145631	adam	100	(5, 5)	tanh
59	58	0.046117	0.145631	adam	250	(5, 5)	tanh
60	61	0.049517	0.144463	adam	250	(5, 5)	relu
61	61	0.049517	0.144463	adam	100	(5, 5)	relu
62	61	0.049517	0.144463	adam	500	(5, 5)	relu
63	64	0.048489	0.142319	adam	100	5	logistic
64	64	0.048489	0.142319	adam	250	5	logistic
65	64	0.048489	0.142319	adam	500	5	logistic
66	67	0.046281	0.130526	sgd	100	5	identity
67	67	0.046281	0.130526	sgd	250	5	identity
68	67	0.046281	0.130526	sgd	500	5	identity
69	70	0.045806	0.129521	adam	500	(5, 5)	logistic
70	70	0.045806	0.129521	adam	250	(5, 5)	logistic
71	70	0.045806	0.129521	adam	100	(5, 5)	logistic
72	73	0.044191	0.123774	adam	500	5	relu
73	73	0.044191	0.123774	adam	250	5	relu
74	73	0.044191	0.123774	adam	100	5	relu

Tabela 193: Hiperparâmetros: happy_data_mlp_1_x_1_r_err_r

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	76	0.043238	0.120738	sgd	100	5	logistic
76	76	0.043238	0.120738	sgd	250	5	logistic
77	76	0.043238	0.120738	sgd	500	5	logistic
78	79	0.043833	0.119700	sgd	500	5	tanh
79	79	0.043833	0.119700	sgd	250	5	tanh
80	79	0.043833	0.119700	sgd	100	5	tanh
81	82	0.027654	0.115818	sgd	500	10	identity
82	82	0.027654	0.115818	sgd	100	10	identity
83	82	0.027654	0.115818	sgd	250	10	identity
84	85	0.039900	0.111358	adam	100	5	identity
85	85	0.039900	0.111358	adam	250	5	identity
86	85	0.039900	0.111358	adam	500	5	identity
87	88	0.030211	0.080719	sgd	100	10	tanh
88	88	0.030211	0.080719	sgd	500	10	tanh
89	88	0.030211	0.080719	sgd	250	10	tanh
90	91	0.014448	0.069590	sgd	250	5	relu
91	91	0.014448	0.069590	sgd	100	5	relu
92	91	0.014448	0.069590	sgd	500	5	relu
93	94	0.024217	0.064164	sgd	100	10	logistic
94	94	0.024217	0.064164	sgd	250	10	logistic
95	94	0.024217	0.064164	sgd	500	10	logistic
96	97	0.000820	0.000826	sgd	250	(5, 5)	tanh
97	97	0.000820	0.000826	sgd	500	(5, 5)	tanh
98	97	0.000820	0.000826	sgd	100	(5, 5)	tanh
99	100	0.000219	-0.000196	sgd	100	10	relu

Tabela 194: Hiperparâmetros: happy_data_mlp_1_x_1_i_err_i

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.041384	0.107935	adam	250	10	relu
1	1	0.041384	0.107935	adam	100	10	relu
2	1	0.041384	0.107935	adam	500	10	relu
3	4	0.046000	0.078142	adam	100	(5, 5)	relu
4	4	0.046000	0.078142	adam	500	(5, 5)	relu
5	4	0.046000	0.078142	adam	250	(5, 5)	relu
6	7	0.040829	0.074313	lbfgs	100	10	tanh
7	8	0.039620	0.064069	adam	100	5	relu
8	8	0.039620	0.064069	adam	250	5	relu
9	8	0.039620	0.064069	adam	500	5	relu
10	11	0.031567	0.062793	lbfgs	100	(5, 5)	tanh
11	12	0.040023	0.062090	adam	250	5	identity
12	12	0.040023	0.062090	adam	500	5	identity
13	12	0.040023	0.062090	adam	100	5	identity
14	15	0.034435	0.060771	sgd	500	(5, 5)	relu
15	15	0.034435	0.060771	sgd	100	(5, 5)	relu
16	15	0.034435	0.060771	sgd	250	(5, 5)	relu
17	18	0.033667	0.059880	adam	500	10	logistic
18	18	0.033667	0.059880	adam	100	10	logistic
19	18	0.033667	0.059880	adam	250	10	logistic
20	21	0.030137	0.059737	lbfgs	250	5	relu
21	21	0.030137	0.059737	lbfgs	100	5	relu
22	21	0.030137	0.059737	lbfgs	500	5	relu
23	24	0.030164	0.059729	lbfgs	500	10	identity
24	24	0.030164	0.059729	lbfgs	250	10	identity

Tabela 195: Hiperparâmetros: happy_data_mlp_1_x_1_i_err_i

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	24	0.030164	0.059729	lbfgs	100	10	identity
26	27	0.030159	0.059729	lbfgs	100	(5, 5)	relu
27	27	0.030159	0.059729	lbfgs	250	(5, 5)	relu
28	27	0.030159	0.059729	lbfgs	500	(5, 5)	relu
29	30	0.030153	0.059724	lbfgs	100	5	identity
30	30	0.030153	0.059724	lbfgs	500	5	identity
31	30	0.030153	0.059724	lbfgs	250	5	identity
32	33	0.030155	0.059720	lbfgs	500	(5, 5)	identity
33	33	0.030155	0.059720	lbfgs	250	(5, 5)	identity
34	33	0.030155	0.059720	lbfgs	100	(5, 5)	identity
35	36	0.030127	0.059706	lbfgs	100	10	relu
36	36	0.030127	0.059706	lbfgs	250	10	relu
37	36	0.030127	0.059706	lbfgs	500	10	relu
38	39	0.032635	0.058954	lbfgs	250	5	logistic
39	39	0.032635	0.058954	lbfgs	500	5	logistic
40	39	0.032635	0.058954	lbfgs	100	5	logistic
41	42	0.033609	0.058007	sgd	500	5	logistic
42	42	0.033609	0.058007	sgd	100	5	logistic
43	42	0.033609	0.058007	sgd	250	5	logistic
44	45	0.032730	0.057535	adam	250	(5, 5)	tanh
45	45	0.032730	0.057535	adam	500	(5, 5)	tanh
46	45	0.032730	0.057535	adam	100	(5, 5)	tanh
47	48	0.031620	0.057525	lbfgs	100	10	logistic
48	48	0.031620	0.057525	lbfgs	250	10	logistic
49	48	0.031620	0.057525	lbfgs	500	10	logistic

Tabela 196: Hiperparâmetros: happy_data_mlp_1_x_1_i_err_i

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	51	0.031722	0.057522	adam	250	5	logistic
51	51	0.031722	0.057522	adam	500	5	logistic
52	51	0.031722	0.057522	adam	100	5	logistic
53	54	0.025412	0.053883	adam	250	5	tanh
54	54	0.025412	0.053883	adam	500	5	tanh
55	54	0.025412	0.053883	adam	100	5	tanh
56	57	0.023066	0.052463	lbfgs	500	5	tanh
57	57	0.023066	0.052463	lbfgs	250	5	tanh
58	59	0.023044	0.052374	lbfgs	100	5	tanh
59	60	0.032745	0.051684	sgd	250	5	identity
60	60	0.032745	0.051684	sgd	100	5	identity
61	60	0.032745	0.051684	sgd	500	5	identity
62	63	0.026823	0.049694	adam	100	10	tanh
63	63	0.026823	0.049694	adam	500	10	tanh
64	63	0.026823	0.049694	adam	250	10	tanh
65	66	0.028379	0.040864	adam	500	(5, 5)	logistic
66	66	0.028379	0.040864	adam	100	(5, 5)	logistic
67	66	0.028379	0.040864	adam	250	(5, 5)	logistic
68	69	0.026382	0.036993	sgd	250	10	tanh
69	69	0.026382	0.036993	sgd	100	10	tanh
70	69	0.026382	0.036993	sgd	500	10	tanh
71	72	0.022893	0.033920	sgd	500	5	tanh
72	72	0.022893	0.033920	sgd	100	5	tanh
73	72	0.022893	0.033920	sgd	250	5	tanh
74	75	0.005772	0.030642	sgd	100	(5, 5)	identity

Tabela 197: Hiperparâmetros: happy_data_mlp_1_x_1_i_err_i

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	75	0.005772	0.030642	sgd	500	(5, 5)	identity
76	75	0.005772	0.030642	sgd	250	(5, 5)	identity
77	78	0.011755	0.025145	adam	500	(5, 5)	identity
78	78	0.011755	0.025145	adam	100	(5, 5)	identity
79	78	0.011755	0.025145	adam	250	(5, 5)	identity
80	81	0.018578	0.024926	sgd	100	10	logistic
81	81	0.018578	0.024926	sgd	250	10	logistic
82	81	0.018578	0.024926	sgd	500	10	logistic
83	84	0.008293	0.011607	lbfgs	500	(5, 5)	logistic
84	84	0.008293	0.011607	lbfgs	250	(5, 5)	logistic
85	84	0.008293	0.011607	lbfgs	100	(5, 5)	logistic
86	87	0.022570	0.009500	sgd	500	10	identity
87	87	0.022570	0.009500	sgd	100	10	identity
88	87	0.022570	0.009500	sgd	250	10	identity
89	90	0.000676	-0.000504	sgd	500	10	relu
90	90	0.000676	-0.000504	sgd	100	10	relu
91	90	0.000676	-0.000504	sgd	250	10	relu
92	93	0.003104	-0.004263	sgd	500	(5, 5)	logistic
93	93	0.003104	-0.004263	sgd	100	(5, 5)	logistic
94	93	0.003104	-0.004263	sgd	250	(5, 5)	logistic
95	96	0.003982	-0.005840	sgd	250	(5, 5)	tanh
96	96	0.003982	-0.005840	sgd	100	(5, 5)	tanh
97	96	0.003982	-0.005840	sgd	500	(5, 5)	tanh
98	99	0.095853	-0.125738	adam	100	10	identity
99	99	0.095853	-0.125738	adam	500	10	identity

Tabela 198: Hiperparâmetros: happy_data_mlp_1_x_1_z_err_z

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
0	1	0.091204	0.402023	lbfgs	500	(5, 5)	tanh
1	2	0.090528	0.399876	lbfgs	250	(5, 5)	tanh
2	3	0.102582	0.387532	lbfgs	500	10	tanh
3	4	0.130702	0.361363	lbfgs	250	10	tanh
4	5	0.148351	0.326758	lbfgs	500	5	logistic
5	6	0.130953	0.257724	lbfgs	250	5	logistic
6	7	0.184576	0.184513	lbfgs	250	5	tanh
7	8	0.176296	0.169761	lbfgs	500	5	tanh
8	9	0.087914	0.125636	adam	500	(5, 5)	relu
9	9	0.087914	0.125636	adam	100	(5, 5)	relu
10	9	0.087914	0.125636	adam	250	(5, 5)	relu
11	12	0.176461	0.116799	lbfgs	250	10	logistic
12	12	0.176461	0.116799	lbfgs	500	10	logistic
13	14	0.045812	0.114175	adam	500	10	relu
14	14	0.045812	0.114175	adam	100	10	relu
15	14	0.045812	0.114175	adam	250	10	relu
16	17	0.032615	0.097669	lbfgs	100	10	tanh
17	18	0.183415	0.097236	lbfgs	500	(5, 5)	logistic
18	19	0.177876	0.094466	lbfgs	250	(5, 5)	logistic
19	20	0.026392	0.069963	adam	500	10	tanh
20	20	0.026392	0.069963	adam	250	10	tanh
21	20	0.026392	0.069963	adam	100	10	tanh
22	23	0.021534	0.066749	lbfgs	100	(5, 5)	tanh
23	24	0.017519	0.059763	lbfgs	100	5	logistic
24	25	0.043890	0.050278	lbfgs	100	10	logistic

Tabela 199: Hiperparâmetros: happy_data_mlp_1_x_1_z_err_z

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
25	26	0.022115	0.042369	sgd	250	10	identity
26	26	0.022115	0.042369	sgd	100	10	identity
27	26	0.022115	0.042369	sgd	500	10	identity
28	29	0.022614	0.041240	lbfgs	500	10	relu
29	29	0.022614	0.041240	lbfgs	250	10	relu
30	29	0.022614	0.041240	lbfgs	100	10	relu
31	32	0.022637	0.041226	lbfgs	100	5	relu
32	32	0.022637	0.041226	lbfgs	250	5	relu
33	32	0.022637	0.041226	lbfgs	500	5	relu
34	35	0.022637	0.041226	lbfgs	100	5	identity
35	35	0.022637	0.041226	lbfgs	250	5	identity
36	35	0.022637	0.041226	lbfgs	500	5	identity
37	38	0.022635	0.041222	lbfgs	250	(5, 5)	identity
38	38	0.022635	0.041222	lbfgs	100	(5, 5)	identity
39	38	0.022635	0.041222	lbfgs	500	(5, 5)	identity
40	41	0.022625	0.041221	lbfgs	500	10	identity
41	41	0.022625	0.041221	lbfgs	250	10	identity
42	41	0.022625	0.041221	lbfgs	100	10	identity
43	44	0.022627	0.041221	lbfgs	500	(5, 5)	relu
44	44	0.022627	0.041221	lbfgs	100	(5, 5)	relu
45	44	0.022627	0.041221	lbfgs	250	(5, 5)	relu
46	47	0.018362	0.040843	adam	250	5	relu
47	47	0.018362	0.040843	adam	100	5	relu
48	47	0.018362	0.040843	adam	500	5	relu
49	50	0.021084	0.040220	adam	250	5	tanh

Tabela 200: Hiperparâmetros: happy_data_mlp_1_x_1_z_err_z

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
50	50	0.021084	0.040220	adam	100	5	tanh
51	50	0.021084	0.040220	adam	500	5	tanh
52	53	0.016658	0.039929	adam	250	5	identity
53	53	0.016658	0.039929	adam	100	5	identity
54	53	0.016658	0.039929	adam	500	5	identity
55	56	0.020083	0.039019	sgd	500	(5, 5)	relu
56	56	0.020083	0.039019	sgd	250	(5, 5)	relu
57	56	0.020083	0.039019	sgd	100	(5, 5)	relu
58	59	0.018198	0.038775	lbfgs	100	5	tanh
59	60	0.008345	0.037785	adam	100	(5, 5)	tanh
60	60	0.008345	0.037785	adam	500	(5, 5)	tanh
61	60	0.008345	0.037785	adam	250	(5, 5)	tanh
62	63	0.015949	0.036991	adam	500	10	logistic
63	63	0.015949	0.036991	adam	250	10	logistic
64	63	0.015949	0.036991	adam	100	10	logistic
65	66	0.017737	0.034148	sgd	100	5	logistic
66	66	0.017737	0.034148	sgd	500	5	logistic
67	66	0.017737	0.034148	sgd	250	5	logistic
68	69	0.013964	0.030190	sgd	250	5	identity
69	69	0.013964	0.030190	sgd	100	5	identity
70	69	0.013964	0.030190	sgd	500	5	identity
71	72	0.032999	0.028213	sgd	250	(5, 5)	identity
72	72	0.032999	0.028213	sgd	100	(5, 5)	identity
73	72	0.032999	0.028213	sgd	500	(5, 5)	identity
74	75	0.034053	0.026581	adam	500	(5, 5)	identity

Tabela 201: Hiperparâmetros: happy_data_mlp_1_x_1_z_err_z

	rank_test_score	std_test_score	mean_test_score	param_solver	param_max_iter	param_hidden_layer_sizes	param_activation
75	75	0.034053	0.026581	adam	250	(5, 5)	identity
76	75	0.034053	0.026581	adam	100	(5, 5)	identity
77	78	0.016239	0.023173	adam	500	5	logistic
78	78	0.016239	0.023173	adam	250	5	logistic
79	78	0.016239	0.023173	adam	100	5	logistic
80	81	0.006546	0.017424	adam	500	(5, 5)	logistic
81	81	0.006546	0.017424	adam	100	(5, 5)	logistic
82	81	0.006546	0.017424	adam	250	(5, 5)	logistic
83	84	0.007564	0.017298	sgd	500	10	tanh
84	84	0.007564	0.017298	sgd	250	10	tanh
85	84	0.007564	0.017298	sgd	100	10	tanh
86	87	0.005890	0.014531	sgd	100	10	logistic
87	87	0.005890	0.014531	sgd	250	10	logistic
88	87	0.005890	0.014531	sgd	500	10	logistic
89	90	0.008033	0.010415	sgd	250	5	tanh
90	90	0.008033	0.010415	sgd	100	5	tanh
91	90	0.008033	0.010415	sgd	500	5	tanh
92	93	0.005271	0.007964	lbfgs	100	(5, 5)	logistic
93	94	0.000332	-0.000264	sgd	100	10	relu
94	94	0.000332	-0.000264	sgd	250	10	relu
95	94	0.000332	-0.000264	sgd	500	10	relu
96	97	0.000423	-0.001684	sgd	100	(5, 5)	logistic
97	97	0.000423	-0.001684	sgd	500	(5, 5)	logistic
98	97	0.000423	-0.001684	sgd	250	(5, 5)	logistic
99	100	0.001332	-0.002675	sgd	250	(5, 5)	tanh

Tabela 202: Hiperparâmetros: happy_data_rf_1_x_1_u_err_u

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.009492	0.661123	absolute_error
2	0.009631	0.656444	squared_error
2	0.009631	0.656444	poisson

Tabela 203: Hiperparâmetros: happy_data_rf_1_x_1_g_err_g

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.348853	0.249199	absolute_error
2	0.349428	0.243870	squared_error
3	0.349428	0.243870	poisson

Tabela 204: Hiperparâmetros: happy_data_rf_1_x_1_r_err_r

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.201388	0.589138	absolute_error
2	0.200345	0.586188	squared_error
2	0.200345	0.586188	poisson

Tabela 205: Hiperparâmetros: happy_data_rf_1_x_1_i_err_i

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.567111	0.200182	absolute_error
2	0.578009	0.195080	squared_error
3	0.578009	0.195080	poisson

Tabela 206: Hiperparâmetros: happy_data_rf_1_x_1_z_err_z

rank_test_score	std_test_score	mean_test_score	param_criterion
1	0.155695	0.322029	absolute_error
2	0.162544	0.312436	poisson
3	0.162544	0.312436	squared_error

Tabela 207: Hiperparâmetros: happy_data_xgb_1_x_1_u_err_u

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.008534	0.761704	reg:squarederror	1
2	0.008081	0.758399	reg:squarederror	5
3	0.009117	0.742496	reg:squarederror	10

Tabela 208: Hiperparâmetros: happy_data_xgb_1_x_1_g_err_g

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.845150	0.104236	reg:squarederror	1
2	1.102057	-0.105898	reg:squarederror	5
3	1.092771	-0.137767	reg:squarederror	10

Tabela 209: Hiperparâmetros: happy_data_xgb_1_x_1_r_err_r

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.214527	0.621245	reg:squarederror	5
2	0.181801	0.618414	reg:squarederror	1
3	0.211056	0.614448	reg:squarederror	10

Tabela 210: Hiperparâmetros: happy_data_xgb_1_x_1_i_err_i

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.369955	0.408694	reg:squarederror	1
2	0.564982	0.107530	reg:squarederror	5
3	0.593098	0.075546	reg:squarederror	10

Tabela 211: Hiperparâmetros: happy_data_xgb_1_x_1_z_err_z

rank_test_score	std_test_score	mean_test_score	param_objective	param_max_depth
1	0.089539	0.523756	reg:squarederror	1
2	0.292639	0.305781	reg:squarederror	5
3	0.322939	0.256691	reg:squarederror	10