## Tabela de Experimentos

## Lucas Junqueira $^1$ , Marcos Daniel Souza Netto $^1$

<sup>1</sup>Departamento de Ciência da Computação Universidade Federal de Minas Gerais Belo Horizonte, MG, Brasil

lucas.junqueira@dcc.ufmg.br, marcos.netto@dcc.ufmg.br

Tabela 1: Resultado dos testes.

Instância	Nº	Algoritmo	Custo Ob-	Custo	Memória	Tempo
	vértices		tido	Ótimo	Pico (MB.)	(seg.)
eil51	51	Christofides	480.88	426	0.05	0.33
CIIST	51	TAT	640.90	426	0.01	0.17
berlin52	52	TAT	10116.01	7542	0.01	0.06
	52	Christofides	8594.03	7542	0.03	0.26
st70	70	TAT	873.35	675	0.01	0.17
St/U	70	Christofides	756.71	675	0.08	0.51
eil76	76	Christofides	623.06	538	0.10	0.66
CII/O	76	TAT	707.15	538	0.02	0.17
nr76	76	TAT	145338.11	108159	0.02	0.17
pr76	76	Christofides	115878.39	108159	0.05	0.41
rat99	99	Christofides	1367.43	1211	0.11	0.72
rai99	99	TAT	1723.23	1211	0.03	0.39
kroD100	100	TAT	27113.30	21294	0.03	0.40
KIODIOO	100	Christofides	23587.75	21294	0.14	0.78
kroE100	100	TAT	30507.42	22068	0.03	0.40
KIOETOO	100	Christofides	23782.61	22068	0.23	1.06
rd100	100	TAT	10791.66	7910	0.03	0.40
10100	100	Christofides	8905.49	7910	0.22	1.11
kroC100	100	TAT	27966.54	20749	0.03	0.40
KIOCIOO	100	Christofides	23469.13	20749	0.14	0.92
kroA100	100	Christofides	23292.98	21282	0.18	0.94
KIOATOO	100	TAT	27211.68	21282	0.06	0.54
kroB100	100	Christofides	24009.19	22141	0.10	0.68
KIODIOO	100	TAT	25881.20	22141	0.03	0.40
eil101	101	TAT	830.54	629	0.03	0.41
elliui	101	Christofides	723.00	629	0.19	1.22
1: 105	105	TAT	19498.41	14379	0.03	0.45
lin105	105	Christofides	16323.68	14379	0.24	0.75
m=107	107	TAT	54238.04	44303	0.04	0.62
pr107	107	Christofides	47894.18	44303	0.11	0.98
124	124	TAT	74140.96	59030	0.05	0.68
pr124	124	Christofides	64437.70	59030	0.10	0.68

	127	TAT	158637.61	118282	0.05	0.72
bier127	127	Christofides	132456.25	118282		1.78
	130	Christofides	6752.28			1.03
ch130	130	TAT	8128.76			0.76
	136	Christofides	103478.24			0.76
pr136	136	TAT	151913.74			0.84
	144	Christofides	70405.28			0.99
pr144	144	TAT	80596.32			0.96
	150	Christofides	30054.39			1.85
kroB150	150	TAT	36154.73			1.05
	150	TAT	35122.57			1.03
kroA150	150	Christofides	29688.32			1.85
	150	TAT	8333.47	6         6110         0.00           8.24         96772         0.10           8.74         96772         0.00           28         58537         0.10           32         58537         0.00           73         26130         0.00           57         26524         0.00           32         26524         0.00           32         26524         0.40           7         6528         0.00           4         6528         0.20           35         73682         0.1           97         42080         0.20           0         2323         0.60           2         2323         0.10           87         29368         0.12           87         29368         0.12           88         29368         1.10           94         29437         0.20           2.17         126643         0.12           9.70         126643         0.10           9         2.15         80369         0.10           75         80369         0.10           5         2378         2.20		1.05
ch150	150	Christofides	7112.04			1.03
	150	Christofides	79314.35			1.10
pr152	152	TAT	87998.69			1.08
	159	TAT	57787.97			1.08
u159	159	Christofides	47581.72			1.68
	195	Christofides	2648.10			2.06
rat195	195	TAT	3317.72			1.87
	193	Christofides	17316.37			2.31
d198	198	TAT	19218.43			1.95
	200	TAT	40030.87			2.13
kroA200	200	Christofides	33602.86			3.22
	200	Christofides	33002.80			2.54
kroB200	200	TAT	40710.96			1.99
	225	Christofides	133282.17			2.54
ts225	225	TAT	188009.70			$\begin{vmatrix} 2.54 \\ 2.54 \end{vmatrix}$
	225	Christofides	4376.00			2.54
tsp225	225	TAT	5115.93			2.54
	223	Christofides	92425.75			
pr226	226	TAT	116692.15			3.06 2.56
		Christofides	2695.15		0.16     1       0.67     2       0.13     1       0.12     2       1.10     3       1.03     2       0.20     1       0.29     2       0.16     2       1.28     2       0.16     2       0.98     3       0.16     2	
gil262	262 262	TAT	3358.15			4.60 3.61
		TAT				3.55
pr264	264 264	Christofides	66466.84 54663.60			
a280	280 280	Christofides TAT	2975.11 3629.72			4.32
						4.16
pr299	299 299	TAT Christofides	64646.03	48191		1
		Christofides	52968.22	48191	0.36       1         0.34       1         0.05       0         0.10       0         0.06       0         0.07       1         0.07       1         0.07       1         0.07       1         0.07       1         0.07       1         0.07       1         0.07       1         0.07       1         0.07       1         0.08       1         0.29       1         0.10       2         0.16       1         0.29       2         0.16       2         1.28       2         0.16       2         1.28       2         0.16       2         2.92       4         0.29       3         0.29       3         0.37       3         3.91       6         11.79       1	4.95
lin318	318	TAT Christofidas	58145.44	42029		5.35
	318	Christofides	47259.76	42029		6.06
rd400	400	Christofides	17538.63	15281		11.18
	400	TAT	20250.38	15281		8.47
fl417	417	Christofides	13424.73	11861	4.57	8.95

	417	TAT	16297.17	11861	0.67	8.95
pr439	439	Christofides	119532.04	107217	4.88	9.98
	439	TAT	144624.16	107217	0.76	10.13
pcb442	442	Christofides	54823.99	50778	9.13	12.06
pc0442	442	TAT	69364.90	50778	0.78	10.25
d493	493	TAT	45427.09	35002	1.02	12.76
u493	493	Christofides	38393.64	35002	14.92	13.05
u574	574	Christofides	41337.61	36905	24.00	17.43
u3/4	574	TAT	49083.15	36905	4.88 0.76 9.13 0.78 1.02 14.92	17.20
rat575	575	Christofides	7802.75	6773	27.48	19.47
rais is	575	TAT	9438.93	6773	4.88         0.76         9.13         0.78         1.02         14.92         24.00         1.35         27.48         1.43         1.80         4.13         35.48         1.84         45.39         2.21         2.64         70.57         105.35         4.24         5.17         140.62         70.33         5.23         128.81         6.22         34.34         7.48         34.34         7.48         34.34         7.48         34.34         7.48         34.34         7.48         34.34         7.48         34.34         7.48         34.37         8.04         35.25         8.35         461.81         422.17         8.76         10.98         172.92         12.18         13.37	17.25
p654	654	TAT	49731.90	34643	1.80	22.30
p034	654	Christofides	39244.71	34643	4.13	22.30
d657	657	Christofides	54738.30	48912	35.48	22.49
u037	657	TAT	65730.19	48912	1.84	22.49
u724	724	Christofides	47954.68	41910	45.39	27.46
u / 24	724	TAT	57779.67	41910	2.21	27.46
rot702	783	TAT	12054.45	8806	2.64	32.02
rat783	783	Christofides	10102.87	8806	70.57	40.21
1002	1002	Christofides	286233.10	259045	105.35	61.19
pr1002	1002	TAT	342244.46	259045	4.24	52.51
1060	1060	TAT	302914.87	224094	5.17	58.64
u1060	1060	Christofides	249108.58	224094	140.62	59.69
1004	1084	Christofides	260833.06	239297	70.33	61.69
vm1084	1084	TAT	315268.35	239297	5.23	61.70
1. 1 1 7 2	1173	Christofides	63392.44	56892	128.81	72.00
pcb1173	1173	TAT	80694.89	56892	6.22	72.00
11.001	1291	Christofides	57930.37	50801	34.34	86.71
d1291	1291	TAT	74658.30	50801	7.43	86.71
14.004	1304	TAT	347782.57	252948	7.48	89.17
rl1304	1304	Christofides	278319.19	252948	34.32	89.17
11222	1323	TAT	380421.59	270199	8.04	91.56
rl1323	1323	Christofides	298261.72	270199	35.25	91.56
1270	1379	TAT	79156.27	56638	8.35	99.84
nrw1379	1379	Christofides	63845.07	56638	461.81	111.24
fl 1400	1400	Christofides	22834.35	20127	422.17	163.04
fl1400	1400	TAT	27915.52	20127		102.65
1.400	1432	Christofides	171558.08	152970	137.44	106.98
u1432	1432	TAT	Γ 214430.78 152970 9	9.54	106.98	
01500	1577	Christofides	24515.85	22249	86.76	130.00
fl1577	1577	TAT	31223.10	22249	27.48 1.43 1.80 4.13 35.48 1.84 45.39 2.21 2.64 70.57 105.35 4.24 5.17 140.62 70.33 5.23 128.81 6.22 34.34 7.43 7.48 34.32 8.04 35.25 8.35 461.81 422.17 8.79 137.44 9.54 86.76 10.98 172.92 12.18	130.00
11.677	1655	Christofides	70542.34	62128		143.64
d1655	1655	TAT	85681.08	62128	12.18	143.64
15.10	1748	TAT	444658.63	336556		160.34
vm1748	1748	Christofides	376240.90	336556		160.34
	1817	Christofides	66796.26	57201	197.23	172.15

	1817	TAT	83501.56	57201	15.05	172.15
rl1889	1889	TAT	449811.49	316536	16.39	186.66
111009	1889	Christofides	344565.85	316536	106.26	186.66
d2103	2103	TAT	124533.87	80450	20.43	231.73
u2103	2103	Christofides	84509.81	80450	25.55	231.73
u2152	2152	TAT	95076.22	64253	20.97	241.74
u2132	2152	Christofides	73895.99	64253	16.39 106.26 20.43 25.55	241.74
u2319	2319	TAT	320532.84	234256	30.75	280.13
u2319	2319	Christofides	272542.91	5.85         316536         106.26           3.87         80450         20.43           .81         80450         25.55           .22         64253         20.97           .99         64253         286.18           2.84         234256         30.75           2.91         234256         1442.82           2.91         378032         31.28           9.59         378032         1208.62           3.90         137694         48.08           137694         NaN           28772         NaN           .83         28772         77.15           1.63         182566         118.53           182566         NaN           8.36         565530         231.04           565530         NaN           2.34         556045         220.81           556045         NaN           923368         *           19982889         *           19982889         *           469445         *           469445         *           469445         *	1442.82	494.20
	2392	TAT	523132.91	378032	31.28	299.23
pr2392	2392	Christofides	425979.59	378032	1208.62	299.22
al- 2020	3038	TAT	196573.90	137694	48.08	482.63
pcb3038	3038	Christofides	NaN	137694	NaN	NaN
92705	3795	Christofides	NaN	28772	NaN	NaN
fl3795	3795	TAT	39072.83	28772	77.15	754.33
£-14461	4461	TAT	254671.63	182566	118.53	1044.83
fnl4461	4461	Christofides	NaN	182566	NaN	NaN
15015	5915	TAT	840348.36	565530	231.04	1823.01
rl5915	5915	Christofides	NaN	565530	20.43 25.55 20.97 286.18 30.75 1442.82 31.28 1208.62 48.08 NaN NaN 77.15 118.53 NaN 231.04 NaN 220.81 NaN *  *  *  *  *  *  *  *  *  *  *  *  *	NaN
-15024	5934	TAT	827482.34	556045	220.81	1833.83
rl5934	5934	Christofides	NaN	556045	16.39 106.26 20.43 25.55 20.97 286.18 30.75 1442.82 31.28 1208.62 48.08 NaN NaN 77.15 118.53 NaN 231.04 NaN 220.81 NaN *  *  *  *  *  *  *  *  *  *  *  *  *	NaN
.111040	11849	TAT	*	923368	*	*
rl11849	11849	Christofides	*	923368	*	*
12500	13509	TAT	*	19982889	20.43 25.55 20.97 286.18 30.75 1442.82 31.28 1208.62 48.08 NaN 77.15 118.53 NaN 231.04 NaN 220.81 NaN *  *  *  *  *  *  *  *  *  *  *  *  *	*
usa13509	13509	Christofides	*	19982889		*
1 11 4051	14051	TAT	*	469445	*	*
brd14051	14051	Christofides	*	469445	1442.82 31.28 1208.62 48.08 NaN 77.15 118.53 NaN 231.04 NaN 220.81 NaN *  *  *  *  *  *  *	*
J15110	15112	TAT	*	1573152	*	*
d15112	15112	Christofides	*	1573152	*	*
110510	18512	TAT	*	645488	*	*
d18512	18512	Christofides	*	645488	*	*