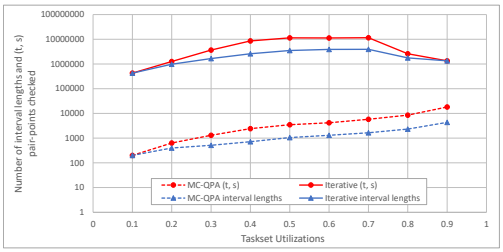
NOTE: For a detailed description of the experimental setup refer to Section 5.1 of the paper.

Criticality Proportion = 0.250000

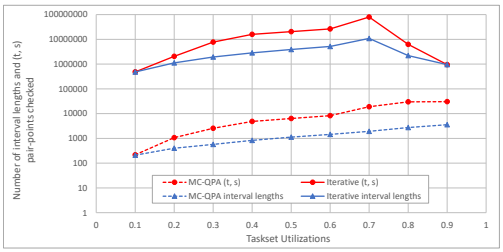
Taskset Utilization	Weighted Schedulability	Generation time	MC-QPA time	Iterative time	Tasksets generated	Av B	MC-QPA (t, s)	Iterative (t, s)	MC-QPA t	Iterative t	Tasksets failed	Failed before t = 0.5B	Failed before t = 0.25B
0.1	1	0.000773	0.000231	13.240347	200	2133.2	200	426640	200	426640	0	0	0
0.2	1	0.000751	0.000588	13.913924	200	4917.865	637	1263903	397	983573	0	0	0
0.3	1	0.000728	0.001082	15.947363	200	8337.055	1300	3645500	512	1667411	0	0	0
0.4	0.993986	0.000753	0.001843	20.904726	200	13097.92	2410	8543796	719	2605805	1	0	0
0.5	0.856926	0.000929	0.002696	27.824331	200	19507.635	3492	11415384	1058	3518950	27	27	1
0.6	0.552292	0.001043	0.003333	34.892429	200	29236.21	4174	11238928	1302	3912087	89	89	10
0.7	0.304198	0.001344	0.004814	42.709766	200	47379.15	5773	11569385	1655	3919547	139	139	80
0.8	0.020325	0.001162	0.006963	44.680524	200	83511.5	8548	2583827	2317	1763515	196	196	186
0.9	0	0.001102	0.01539	46.166929	200	185007.085	18235	1338652	4346	1338652	200	200	177



Number of interval lengths and (t, s) pair-points checked by the two algorithms are plotted against LO-criticality taskset utilization values at criticality proportion 0.25

Criticality Proportion = 0.500000

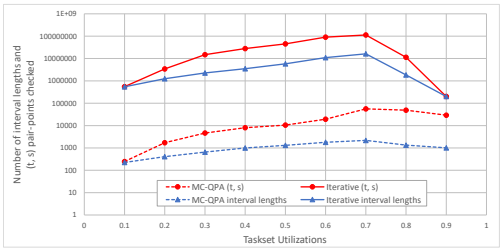
Taskset Utilization	Weighted Schedulability	Generation time	MC-QPA time	Iterative time	Tasksets generated	Av B	MC-QPA (t, s)	Iterative (t, s)	MC-QPA t	Iterative t	Tasksets failed	Failed before t = 0.5B	Failed before t = 0.25B
0.1	1	0.000922	0.000297	46.453463	200	2404.375	217	482232	210	480875	0	0	0
0.2	1	0.001115	0.001042	47.670602	200	5608.75	1071	2053243	400	1121750	0	0	0
0.3	1	0.001322	0.002228	52.44187	200	9689.99	2561	7719865	571	1937998	0	0	0
0.4	0.932959	0.000945	0.003696	62.21872	200	15008.47	4835	15925066	833	2853672	12	11	0
0.5	0.734001	0.00106	0.004831	75.250272	200	23690.005	6345	20564570	1131	3872938	52	52	3
0.6	0.552951	0.001267	0.0064	92.374067	200	40038.51	8293	26390882	1450	5142689	90	90	30
0.7	0.368491	0.001172	0.013594	200.581093	200	97359.805	18938	79477161	1932	10870002	126	126	109
0.8	0.039671	0.000967	0.021028	205.345433	200	179962.44	29837	6292587	2735	2201252	192	192	191
0.9	0	0.000985	0.023763	206.709231	200	213376.255	30438	952358	3566	952358	200	200	194



Number of interval lengths and (t, s) pair-points checked by the two algorithms are plotted against LO-criticality taskset utilization values at criticality proportion 0.50

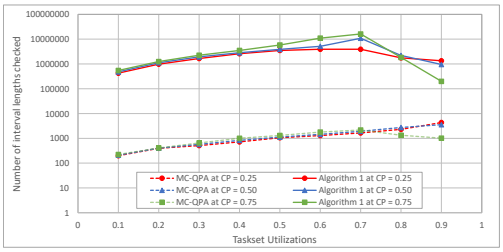
Criticality Proportion = 0.750000

Taskset Utilization	Weighted Schedulability	Generation time	MC-QPA time	Iterative time	Tasksets generated	Av B	MC-QPA (t, s)	Iterative (t, s)	MC-QPA t	Iterative t	Tasksets failed	Failed before t = 0.5B	Failed before t = 0.25B
0.1	1	0.000763	0.000278	207.018614	200	2723.965	247	549765	224	544793	0	0	0
0.2	1	0.00076	0.001397	208.972982	200	6260.71	1702	3413280	409	1252142	0	0	0
0.3	0.994	0.000823	0.003403	217.743195	200	11350.215	4667	14959848	654	2262118	1	1	0
0.4	0.856054	0.001031	0.005645	234.243941	200	19633.39	8057	27751592	1003	3510200	27	27	0
0.5	0.757604	0.001419	0.007399	261.555689	200	34039.345	10479	45053309	1305	5813256	50	50	4
0.6	0.657489	0.001253	0.01288	318.169632	200	75990.46	19384	90433183	1797	11015481	69	69	61
0.7	0.19949	0.001076	0.038073	551.847122	200	248820.595	56073	113175141	2177	16202257	159	159	159
0.8	0.014559	0.001128	0.035804	562.08545	200	231701.72	48901	11329054	1342	1847756	197	197	197
0.9	0	0.000854	0.025091	562.935171	200	162473.955	29223	199763	1014	199763	200	200	200



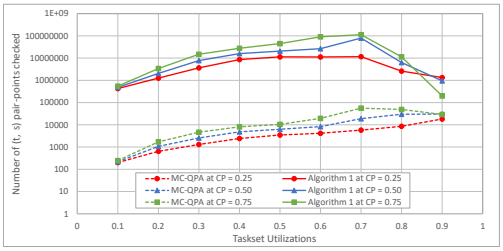
Number of interval lengths and (t, s) pair-points checked by the two algorithms are plotted against LO-criticality taskset utilization values at criticality proportion 0.75

	Criticality Proportion = 0.25		Criticality Proportion = 0.50		Criticality Proportion = 0.75	
Taskset Utilization	MC-QPA t	Iterative t	MC-QPA t	Iterative t	MC-QPA t	Iterative t
0.1	200	426640	210	480875	224	544793
0.2	397	983573	400	1121750	409	1252142
0.3	512	1667411	571	1937998	654	2262118
0.4	719	2605805	833	2853672	1003	3510200
0.5	1058	3518950	1131	3872938	1305	5813256
0.6	1302	3912087	1450	5142689	1797	11015481
0.7	1655	3919547	1932	10870002	2177	16202257
0.8	2317	1763515	2735	2201252	1342	1847756
0.9	4346	1338652	3566	952358	1014	199763



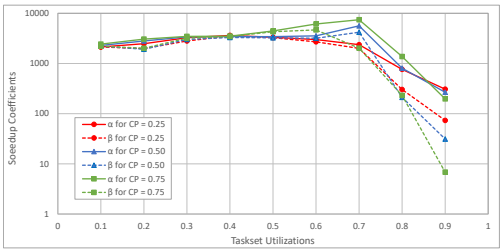
Number of interval lengths checked by the two algorithms are plotted against LO-criticality taskset utilization values for different criticality proportion values

	Criticality Proportion = 0.25		Criticality Proportion = 0.50		Criticality Proportion = 0.75	
Taskset Utilization	MC-QPA (t, s)	Iterative (t, s)	MC-QPA (t, s)	Iterative (t, s)	MC-QPA (t, s)	Iterative (t, s)
0.1	200	426640	217	482232	247	549765
0.2	637	1263903	1071	2053243	1702	3413280
0.3	1300	3645500	2561	7719865	4667	14959848
0.4	2410	8543796	4835	15925066	8057	27751592
0.5	3492	11415384	6345	20564570	10479	45053309
0.6	4174	11238928	8293	26390882	19384	90433183
0.7	5773	11569385	18938	79477161	56073	113175141
0.8	8548	2583827	29837	6292587	48901	11329054
0.9	18235	1338652	30438	952358	29223	199763



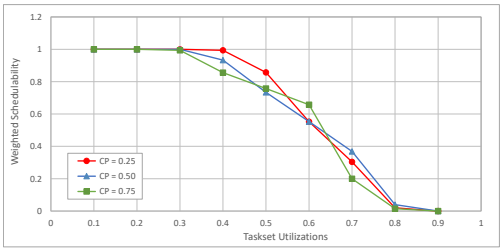
Number of (t, s) pair-points checked by the two algorithms are plotted against LO-criticality taskset utilization values for different criticality proportion values

	Criticality Proportion = 0.25		Criticality Proportion = 0.50		Criticality Proportion = 0.75	
Taskset Utilization	Alpha	Beta	Alpha	Beta	Alpha	Beta
0.1	2133.2	2133.2	2289.880952	2222.267281	2432.111607	2225.769231
0.2	2477.513854	1984.149137	2804.375	1917.126984	3061.471883	2005.452409
0.3	3256.662109	2804.230769	3394.042032	3014.394768	3458.896024	3205.452753
0.4	3624.207232	3545.143568	3425.776711	3293.705481	3499.700897	3444.407596
0.5	3326.039698	3269.010309	3424.348364	3241.066982	4454.602299	4299.390114
0.6	3004.675115	2692.603737	3546.682069	3182.308212	6129.928214	4665.351991
0.7	2368.306344	2004.050754	5626.295031	4196.702978	7442.469913	2018.353593
0.8	761.1199827	302.2726954	804.8453382	210.8987834	1376.867362	231.6732582
0.9	308.0193281	73.41113244	267.0661806	31.28845522	197.004931	6.835814256

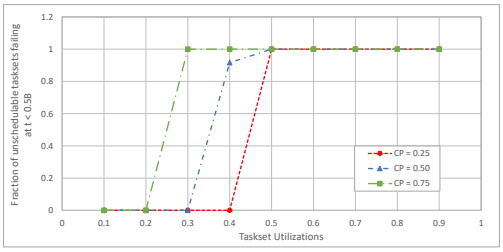


Speedup coefficients α and β (defined in section 5.1 of the paper) plotted against LO-criticality taskset utilization values for different criticality proportion values

	Criticality Proportion = 0.25		Criticality Proportion = 0.50		Criticality Proportion = 0.75	
Taskset Utilization	Weighted Schedulability	Unschedulable before t < 0.5B	Weighted Schedulability	Unschedulable before t < 0.5B	Weighted Schedulability	Unschedulable before t < 0.5B
0.1	1	#DIV/0!	1	#DIV/0!	1	#DIV/0!
0.2	1	#DIV/0!	1	#DIV/0!	1	#DIV/0!
0.3	1	#DIV/0!	1	#DIV/0!	0.994	1
0.4	0.993986	0	0.932959	0.916666667	0.856054	1
0.5	0.856926	1	0.734001	1	0.757604	1
0.6	0.552292	1	0.552951	1	0.657489	1
0.7	0.304198	1	0.368491	1	0.19949	1
0.8	0.020325	1	0.039671	1	0.014559	1
0.9	0	1	0	1	0	1



Weighted schedulability plotted against LO-criticality taskset utilization values for different criticality proportion values



Fraction of unschedulable tasksets failing before t = 0.5B plotted against LO-criticality taskset utilization values for different criticality proportion values