LP-Based Approaches for Goal Recognition as Planning (Supplemental Material)

Paper #6100

	Т	$soft_C$ δ_{HC}								δ _{HCU} RG 2009						PC	M 2017 I	hac	POM 2017 h _{uniq}		
#	G	% Obs	101	Time	Acc %	S in G	Time	Acc %	S in G	Time	Acc %	S in G	Time	Acc %	S in G	Time	Acc %	S in G	Time	Acc %	S in G
п	1191	10	0.0	1.66	95.9%	9.5	11.575	95.5%	7.81	11.574	95.9%	8.7	1.22	86.8%	7.84	0.144	39.9%	1.05	0.131	31.7%	1.04
BLOCKS (0)		30	0.0	1.654	92.7%	4.69	11.57	89.4%	2.79	11.567	94.3%	5.12	1.639	87.2%	3.57	0.156	50.6%	1.09	0.144	51.4%	1.06
	0.0	50	0.0	1.652	96.8%	3.21	11.581	92.7%	1.78	11.587	93.9%	3.24	2.402	97.9%	2.63	0.179	65.0%	1.09	0.168	60.1%	1.08
		70	0.0	1.655	98.8%	2.1	11.594	98.8%	1.41	11.595	98.8%	1.8	3.785	97.5%	1.83	0.192	84.8%	1.12	0.184	79.0%	1.14
		100	0.0	1.644	100.0%	1.79	11.904	100.0%	1.21	11.937	100.0%	1.21	6.791	100.0%	1.46	0.246	100.0%	1.36	0.239	100.0%	1.09
		10	0.0	1.249	65.5%	3.99	8.299	61.9%	2.15	8.305	71.4%	3.51	1.496	77.4%	3.99	0.369	35.7%	1.18	0.393	32.1%	1.1
DEPOTS (0)	0.0	30	0.0	1.255	64.3%	2.38	8.292	71.4%	1.4	8.298	88.1%	4.17	2.309	77.4%	2.39	0.357	58.3%	1.06	0.393	47.6%	1.07
		50	0.0	1.258	90.5%	2.27	8.282	92.9%	1.38	8.28	98.8%	3.65	3.411	84.5%	1.92	0.369	76.2%	1.06	0.405	71.4%	1.02
		70	0.0	1.254	95.2%	1.7	8.282	97.6%	1.06	8.279	98.8%	1.75	5.27	91.7%	1.68	0.393	89.3%	1.01	0.44	84.5%	1.01
		100	0.0	1.247	100.0%	2.07	8.296	100.0%	1.0	8.296	100.0%	1.0	7.117	92.9%	1.46	0.464	100.0%	1.04	0.5	100.0%	1.04
DRIVERLOG (0)		10	0.0	0.747	88.1%	3.96	5.159	77.4%	2.61	5.168	78.6%	3.17	1.169	96.4%	4.71	0.333	41.7%	1.04	0.321	35.7%	1.11
		30	0.0	0.745	82.1%	2.05	5.149	83.3%	1.69	5.163	91.7%	2.76	1.411	92.9%	3.35	0.31	54.8%	1.13	0.31	47.6%	1.1
	0.0	50	0.0	0.75	91.7%	1.56	5.167	92.9%	1.23	5.146	97.6%	2.0	1.694	94.0%	2.88	0.321	72.6%	1.17	0.31	64.3%	1.14
		70	0.0	0.748	95.2%	1.46	5.148	95.2%	1.14	5.146	95.2%	1.5	1.973	89.3%	2.46	0.333	90.5%	1.14	0.321	90.5%	1.17
		100	0.0		100.0%	1.29	5.166	100.0%	1.04	5.157	100.0%	1.04	2.821	89.3%	2.14	0.321	100.0%	1.21	0.321	100.0%	1.18
DWR (0)	0.0	10	0.0	0.837	67.9%	2.79	5.759	54.8%	2.21	5.745	95.2%	5.45	1.767	83.3%	4.21	0.452	36.9%	1.1	0.512	33.3%	1.06
		30	0.0	0.837	83.3%	1.69	5.745	83.3%	1.58	5.753	100.0%	4.92	2.723	81.0%	3.35	0.452	60.7%	1.04	0.5	51.2%	1.06
		50	0.0	0.837	91.7%	1.33	5.742	90.5%	1.21	5.734	100.0%	3.98	4.822	72.6%	2.27	0.488	66.7%	1.0	0.548	61.9%	1.01
		70	0.0	0.841	100.0%	1.06	5.75	97.6%	1.07	5.735	100.0%	2.26	10.914	70.2%	2.05	0.536	89.3%	1.0	0.607	78.6%	1.05
		100	0.0		100.0%	1.0	5.763	100.0%	1.0	5.75	100.0%	1.0	25.092	67.9%	1.68	0.643	100.0%	1.0	0.75	96.4%	1.04
IPC-GRID (0)		10	0.0	0.876	97.4%	2.58	6.216	92.8%	1.92	6.209	94.8%	2.32	1.091	96.1%	2.46	0.248	66.7%	2.58	0.242	62.7%	2.58
	0.0	30	0.0	0.88	98.0%	1.56	6.051	95.4%	1.29	6.044	98.0%	1.48	1.476	97.4%	1.42	0.242	81.7%	1.65	0.242	83.7%	1.66
		50	0.0	0.881	98.7%	1.18	6.123	98.7%	1.11	6.122	100.0%	1.25	1.905	100.0%	1.16	0.261	90.8%	1.18	0.248	90.8%	1.18
		70	0.0	0.885	98.7%	1.13	6.251	99.4%	1.1	6.259	100.0%	1.19	2.552	100.0%	1.05	0.268	97.4%	1.07	0.268	97.4%	1.07
		100	0.0	0.819	100.0%	1.02	5.825	100.0%	1.03	5.826	100.0%	1.03	4.057	100.0%	1.0	0.262	100.0%	1.0	0.262	100.0%	1.0
HERRY (0)		10	0.0		100.0%	3.52	4.201	100.0%	3.17	4.201	100.0%	3.2	0.491	98.8%	3.37	0.071	58.3%	1.26	0.071	58.3%	1.18
	l	30	0.0		100.0%	1.88	4.072	100.0%	1.56	4.075	100.0%	1.76	0.677	100.0%	1.76	0.06	85.7%	1.12	0.06	83.3%	1.06
	0.0	50	0.0	0.57	100.0%	1.39	4.141	100.0%	1.29	4.141	100.0%	1.44	0.795	100.0%	1.42	0.06	95.2%	1.07	0.06	91.7%	1.01
		70	0.0		100.0%	1.1	4.199	100.0%	1.1	4.197	100.0%	1.12	1.253	98.8%	1.14	0.071	100.0%	1.01	0.071	100.0%	1.0
		100	0.0	0.572	100.0%	1.07	4.196	100.0%	1.07	4.204	100.0%	1.07	1.63	100.0%	1.07	0.071	100.0%	1.0	0.071	100.0%	1.0
(0) (0)	0.0	10	0.0	1.006	98.7%	3.57	6.79	100.0%	2.5	6.789	100.0%	2.8	1.201	99.3%	2.98	0.641	55.6%	1.73	0.641	49.0%	1.24
		30	0.0	1.002	98.7%	1.84	6.953	98.0%	1.3	6.944	98.0%	1.76	1.799	98.7%	1.39	0.621	80.4%	1.21	0.634	76.5%	1.12
		50	0.0	1.002	98.0%	1.98	6.944	98.7%	1.13	6.959	98.7%	1.37	2.509	98.7%	1.29	0.641	90.2%	1.1	0.647	86.3%	1.05
		70	0.0	1.002	94.8%	1.58	6.938	100.0%	1.08	6.95	100.0%	1.15	3.461	100.0%	1.13	0.667	96.7%	1.06	0.66	96.7%	1.02
		100	0.0	0.958	100.0%	6.84	6.63	100.0%	1.0	6.633	100.0%	1.0	4.832	100.0%	1.0	0.607	100.0%	1.0	0.607	100.0%	1.0
MICONIC (0)	0.0	10	0.0	0.74	100.0%	4.0	4.905	100.0%	2.12	4.886	100.0%	2.29	0.813	100.0%	3.26	0.464	67.9%	1.33	0.352	54.8%	1.26
		30	0.0	0.745	100.0%	2.98	4.897	100.0%	1.19	4.895	100.0%	1.46	1.191	100.0%	1.58	0.452	96.4%	1.11	0.364	90.5%	1.08
		50 70	0.0	0.741	97.6%	2.99	4.901	100.0% 100.0%	1.1	4.89 4.891	100.0%	1.32	1.722 2.59	100.0%	1.29	0.452	96.4% 100.0%	1.01	0.352	96.4% 100.0%	1.0 1.01
		100			96.4% 100.0%	3.13	4.892 4.894	100.0%	1.01	4.891	100.0% 100.0%			100.0% 100.0%			100.0%	1.01		100.0%	
			0.0			6.0			1.0			1.0	5.107		1.0	0.464			0.364		1.0
	0.0	10 30	0.0	0.724	98.8%	3.86	4.863	98.8%	2.71	4.858	100.0%	2.94	0.745 1.03	98.8%	2.86	0.348	64.3%	1.73 1.24	0.371	51.2%	1.11
))))		50	0.0	0.726	92.9% 94.0%	2.46 1.77	4.881 4.87	85.7% 98.8%	1.17 1.14	4.87 4.856	91.7% 98.8%	1.83 1.44	1.03	100.0% 100.0%	1.67	0.348	83.3% 92.9%	1.24	0.348	69.0% 85.7%	1.07 1.01
ROVERS (0)		70	0.0	0.73	94.0%	1.77	4.858	98.8%	1.14	4.838	98.8%	1.44	1.177	100.0%	1.07	0.348	92.9%	1.08	0.348	91.7%	1.01
		100	0.0	0.73	100.0%	1.21	4.823	98.8% 100.0%	1.01	4.838	100.0%	1.06	2.298	100.0%	1.07	0.348	100.0%	1.01	0.571	100.0%	1.0
		100	0.0	0.729	91.7%	5.3	5.196	91.7%	2.73	5.204	92.9%	2.92	1.076	97.6%	3.42	0.371	57.1%	1.56	0.371	47.6%	1.21
SATELLITE (0)		30	0.0	0.765	86.9%	4.7	5.178	91.7%	1.76	5.204	96.4%	2.92	1.183	97.6%	2.4	0.45	76.2%	1.30	0.45	69.0%	1.14
	0.0	50	0.0	0.762	80.9%	4.7	5.178	92.9%	1.76	5.194	98.8%	1.77	1.183	97.6%	1.69	0.45	76.2% 85.7%	1.1	0.414	81.0%	1.14
		70	0.0	0.765	82.1%	4.55	5.197	97.6%	1.11	5.194	97.6%	1.77	1.841	96.4%	1.52	0.420	97.6%	1.02	0.414	94.0%	1.04
		100	0.0		100.0%	6.0	5.212	100.0%	1.07	5.205	100.0%	1.07	2.045	96.4%	1.32	0.414	100.0%	1.07	0.414	100.0%	1.07
	_	100	0.0	1.225	76.2%	2.23	7.827	72.6%	1.61	7.849	78.6%	2.39	3.153	69.0%	4.02	0.607	53.6%	2.06	0.607	51.2%	1.86
SOKOBAN (0)	0.0	30	0.0	1.227	84.5%	1.39	7.744	89.3%	1.11	7.742	95.2%	1.75	4.622	89.3%	4.17	0.595	57.1%	1.37	0.607	56.0%	1.21
		50	0.0	1.224	90.5%	1.26	7.701	95.2%	1.08	7.709	100.0%	1.46	7.441	89.3%	4.11	0.595	71.4%	1.32	0.607	69.0%	1.21
		70	0.0	1.216	94.0%	1.33	7.69	97.6%	1.04	7.677	98.8%	1.15	9.877	89.3%	4.18	0.607	83.3%	1.05	0.607	86.9%	1.08
		100	0.0		100.0%	1.21	7.67	100.0%	1.0	7.658	100.0%	1.0	12.996	89.3%	4.54	0.607	100.0%	1.0	0.643	100.0%	1.0
ZENO (0)	_	10	0.0	1.054	97.6%	3.7	6.843	86.9%	2.71	6.871	88.1%	3.12	1.814	96.4%	3.4	0.567	39.3%	1.11	0.555	36.9%	1.05
		30	0.0	1.049	85.7%	2.08	6.838	90.5%	1.61	6.854	96.4%	2.56	2.539	88.1%	2.12	0.555	70.2%	1.15	0.531	60.7%	1.02
	0.0	50	0.0	1.059	92.9%	1.51	6.845	95.2%	1.15	6.851	96.4%	1.83	3.079	92.9%	1.42	0.543	78.6%	1.07	0.555	76.2%	1.02
	0.0	70	0.0	1.059	98.8%	1.13	6.855	100.0%	1.0	6.851	100.0%	1.04	3.907	96.4%	1.13	0.567	97.6%	1.05	0.555	90.5%	1.0
		100	0.0	1.059	100.0%	1.0	6.852	100.0%	1.0	6.842	100.0%	1.0	4.866	100.0%	1.07	0.543	100.0%	1.0	0.543	100.0%	1.0
Average	 	1		0.953	93.72%	2.60	6.456	94.11%	1.55	6.457	96.94%	2.14	3.322	93.38%	2.30	0.397	79.66%	1.18	0.400	75.87%	1.12
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Table 1: Results comparing the state-of-the-art in goal recognition as planning for partial and full observability.