

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

Paper #6100

				soft _C			δ_{HC}			δ_{HCU}			RG 2009			POM 2017 h_{gc}			POM 2017 h_{uniq}		
#	$ \mathcal{G} $	% Obs	$ \mathcal{O} $	Time	Acc %	S in \mathcal{G}	Time	Acc %	S in \mathcal{G}	Time	Acc %	S in \mathcal{G}	Time	Acc %	S in \mathcal{G}	Time	Acc %	S in \mathcal{G}	Time	Acc %	S in \mathcal{G}
BLOCKS (0)	0.0	25	0.0	1.485	61.1%	7.28	16.033	58.3%	6.22	16.019	75.0%	10.39	1.045	38.9%	5.39	0.083	2.8%	1.22	0.083	8.3%	1.0
		50	0.0	1.51	63.9%	5.28	12.626	52.8%	3.31	12.675	88.9%	12.44	1.122	52.8%	4.61	0.083	25.0%	1.19	0.083	13.9%	1.08
		75	0.0	1.491	77.8%	3.75	11.282	80.6%	2.11	11.235	91.7%	7.36	1.405	75.0%	2.72	0.056	47.2%	1.19	0.056	38.9%	1.25
		100	0.0	1.488	86.1%	3.39	10.576	88.9%	1.92	10.629	97.2%	2.86	1.652	86.1%	2.03	0.083	77.8%	1.36	0.056	75.0%	1.33
DEPOTS (0)	0.0	25	0.0	1.064	75.0%	4.17	11.495	52.8%	2.19	11.445	63.9%	4.47	0.284	5.6%	9.17	0.528	38.9%	1.64	0.528	27.8%	1.22
		50	0.0	1.069	75.0%	3.58	10.299	61.1%	1.67	10.263	83.3%	4.14	0.189	0.0%	9.33	0.472	52.8%	1.22	0.472	41.7%	1.19
		75	0.0	1.076	97.2%	2.19	8.671	88.9%	1.19	8.674	94.4%	2.14	0.361	11.1%	8.28	0.472	80.6%	1.11	0.5	75.0%	1.06
		100	0.0	1.068	94.4%	2.53	8.098	94.4%	1.19	8.075	91.7%	1.22	0.292	5.6%	8.83	0.472	88.9%	1.11	0.472	86.1%	1.11
DRIVERLOG (0)	0.0	25	0.0	0.471	66.7%	3.31	5.383	55.6%	2.61	5.362	83.3%	4.69	0.234	44.4%	5.89	0.111	36.1%	1.33	0.111	25.0%	1.08
		50	0.0	0.466	80.6%	2.67	4.982	77.8%	1.72	4.97	91.7%	3.47	0.282	38.9%	4.72	0.083	58.3%	1.28	0.083	52.8%	1.11
		75	0.0	0.471	88.9%	1.75	4.825	86.1%	1.25	4.855	94.4%	2.31	0.239	30.6%	5.47	0.083	61.1%	1.33	0.111	52.8%	1.14
		100	0.0	0.471	94.4%	1.58	4.511	97.2%	1.31	4.511	97.2%	1.64	0.358	44.4%	4.42	0.083	94.4%	1.47	0.083	97.2%	1.42
DNR (0)	0.0	25	0.0	0.709	80.6%	2.69	7.546	72.2%	2.0	7.614	97.2%	5.11	0.808	41.7%	5.67	0.444	44.4%	1.14	0.5	33.3%	1.0
		50	0.0	0.697	91.7%	1.86	7.108	80.6%	1.67	7.153	94.4%	4.47	1.569	22.2%	5.39	0.417	63.9%	1.08	0.444	50.0%	1.06
		75	0.0	0.701	100.0%	1.39	6.509	91.7%	1.22	6.482	94.4%	1.78	2.793	19.4%	5.5	0.417	94.4%	1.06	0.472	69.4%	1.08
		100	0.0	0.705	97.2%	1.03	5.803	100.0%	1.08	5.768	97.2%	1.06	7.392	30.6%	4.42	0.444	94.4%	1.0	0.472	94.4%	1.03
IPC-GRID (0)	0.0	25	0.0	0.751	91.1%	2.32	7.871	81.1%	1.67	7.889	85.6%	2.61	0.265	12.2%	7.56	0.244	58.9%	1.78	0.233	53.3%	1.72
		50	0.0	0.753	96.7%	1.59	6.03	94.4%	1.14	6.011	94.4%	1.71	0.2	4.4%	8.07	0.222	85.6%	1.33	0.211	83.3%	1.32
		75	0.0	0.755	98.9%	1.22	5.481	98.9%	1.1	5.497	97.8%	1.13	0.223	6.7%	7.89	0.211	94.4%	1.09	0.211	94.4%	1.09
		100	0.0	0.755	100.0%	1.0	5.01	100.0%	1.0	4.988	90.0%	0.9	0.266	10.0%	7.77	0.2	100.0%	1.0	0.2	100.0%	1.0
FERRY (0)	0.0	25	0.0	0.394	77.8%	2.81	4.745	80.6%	2.78	4.736	86.1%	5.11	0.256	75.0%	2.92	0.028	47.2%	1.28	0.028	27.8%	1.08
		50	0.0	0.395	91.7%	1.78	4.402	97.2%	1.72	4.365	97.2%	3.83	0.375	94.4%	1.94	0.028	88.9%	1.31	0.028	77.8%	1.06
		75	0.0	0.402	88.9%	1.56	4.236	94.4%	1.56	4.223	97.2%	2.42	0.585	88.9%	1.53	0.028	97.2%	1.17	0.028	83.3%	1.08
		100	0.0	0.4	97.2%	1.28	4.187	97.2%	1.17	4.183	97.2%	1.17	0.906	97.2%	1.25	0.028	100.0%	1.08	0.028	97.2%	1.06
LOGISTICS (0)	0.0	25	0.0	0.65	100.0%	3.03	7.461	91.7%	2.11	7.446	97.2%	3.42	0.203	5.6%	9.42	0.222	61.1%	1.56	0.222	38.9%	1.08
		50	0.0	0.654	94.4%	1.53	6.875	97.2%	1.1	6.848	97.2%	1.36	0.214	5.6%	9.33	0.194	83.3%	1.17	0.167	75.0%	1.06
		75	0.0	0.652	100.0%	1.58	6.253	100.0%	1.03	6.234	100.0%	1.06	0.259	13.9%	8.78	0.194	97.2%	1.0	0.167	100.0%	1.03
		100	0.0	0.655	94.4%	2.17	5.436	100.0%	1.08	5.438	100.0%	1.08	0.321	13.9%	8.78	0.194	100.0%	1.06	0.194	100.0%	1.03
MICRONIC (0)	0.0	25	0.0	0.413	55.6%	3.67	4.892	52.8%	1.97	4.908	83.3%	4.17	0.318	88.9%	2.89	0.111	50.0%	1.39	0.111	33.3%	1.17
		50	0.0	0.416	72.2%	2.67	4.533	80.6%	1.17	4.566	97.2%	2.17	0.387	100.0%	1.75	0.083	83.3%	1.11	0.083	80.6%	1.11
		75	0.0	0.421	69.4%	2.69	4.387	91.7%	1.06	4.379	100.0%	1.31	0.483	100.0%	1.19	0.083	97.2%	1.03	0.083	88.9%	1.03
		100	0.0	0.424	50.0%	3.94	4.294	100.0%	1.03	4.311	100.0%	1.08	0.628	100.0%	1.0	0.056	100.0%	1.0	0.056	100.0%	1.0
ROVERS (0)	0.0	25	0.0	0.469	88.9%	4.08	5.346	72.2%	2.22	5.359	75.0%	2.78	0.264	33.3%	4.78	0.083	52.8%	1.14	0.083	50.0%	1.14
		50	0.0	0.466	83.3%	2.92	4.973	80.6%	1.61	4.941	88.9%	2.92	0.296	50.0%	3.81	0.056	69.4%	1.31	0.056	58.3%	1.08
		75	0.0	0.466	86.1%	2.39	4.889	91.7%	1.14	4.905	100.0%	1.47	0.301	44.4%	3.92	0.083	86.1%	1.14	0.056	75.0%	1.08
		100	0.0	0.469	97.2%	1.67	4.513	100.0%	1.03	4.53	100.0%	1.03	0.305	38.9%	4.06	0.083	97.2%	1.11	0.056	86.1%	1.03
SATELLITE (0)	0.0	25	0.0	0.371	83.3%	4.81	4.51	75.0%	3.31	4.444	88.9%	4.28	0.224	58.3%	4.53	0.056	52.8%	2.42	0.056	30.6%	1.33
		50	0.0	0.367	72.2%	4.86	4.056	72.2%	2.44	4.091	83.3%	3.92	0.255	72.2%	3.58	0.028	72.2%	2.08	0.028	44.4%	1.31
		75	0.0	0.367	61.1%	3.97	3.915	83.3%	1.44	3.966	88.9%	2.83	0.28	77.8%	2.75	0.028	80.6%	1.28	0.028	69.4%	1.08
		100	0.0	0.369	61.1%	4.22	3.929	94.4%	1.47	3.935	94.4%	1.86	0.298	72.2%	3.0	0.056	94.4%	1.31	0.028	91.7%	1.19
SONOBAY (0)	0.0	25	0.0	1.23	75.0%	2.22	13.104	36.1%	1.64	13.101	72.2%	4.69	1.953	25.0%	7.28	0.75	41.7%	1.75	0.75	38.9%	1.56
		50	0.0	1.231	86.1%	1.78	11.319	50.0%	1.17	11.323	58.3%	1.94	2.086	19.4%	6.67	0.667	66.7%	1.44	0.694	58.3%	1.08
		75	0.0	1.215	94.4%	1.25	9.527	36.1%	1.0	9.46	36.1%	0.56	2.121	19.4%	7.69	0.694	80.6%	1.22	0.667	72.2%	1.03
		100	0.0	1.21	97.2%	1.42	8.946	33.3%	1.11	9.029	36.1%	0.5	5.878	33.3%	6.47	0.694	94.4%	1.22	0.694	86.1%	1.06
ZENO (0)	0.0	25	0.0	0.736	75.0%	3.89	8.209	44.4%	2.72	8.27	80.6%	5.25	0.946	72.2%	3.92	0.417	55.6%	1.92	0.417	33.3%	1.03
		50	0.0	0.723	88.9%	1.89	7.712	91.7%	1.61	7.653	97.2%	4.03	1.025	88.9%	1.78	0.361	77.8%	1.67	0.361	61.1%	1.08
		75	0.0	0.739	91.7%	1.67	6.785	91.7%	1.08	6.766	100.0%	2.44	1.167	100.0%	1.22	0.361	88.9%	1.25	0.361	77.8%	1.0
		100	0.0	0.733	91.7%	1.11	6.177	97.2%	1.0	6.141	100.0%	1.42	1.289	97.2%	1.08	0.361	97.2%	1.08	0.333	97.2%	1.03
Average				0.729	84.21%	2.65	6.870	80.14%	1.69	6.868	88.68%	3.04	0.929	47.22%	5.01	0.234	73.21%	1.30	0.234	64.71%	1.13
$\downarrow \text{AVG}_{\text{APPROACH}_6} >$																					

Table 1: Results comparing the state-of-the-art in goal recognition as planning for partial and full observability.