

IPC-08: Learning Track Results

Time Metric Results

Systems Domains	Cabala	Dae1	Dae2	Macro AltAlt	Obtuse Wedge	PbP.s	Replica	Roller	Sayphi Rules	Wizard- FF	Wizard- SGP	RFA1	RFA2
GoldMiner	0.00	0.01	0.01	6.58	9.38	4.42	5.14	6.37	3.85	24.40	23.25	0.00	0.29
Matching BW	0.00	0.00	0.00	5.28	2.03	25.85	0.00	0.00	0.00	0.52	0.00	0.02	0.00
N-Puzzle	0.00	0.00	0.00	3.91	29.33	7.10	0.00	0.26	0.09	2.76	4.42	0.63	0.00
Parking	0.00	0.00	0.00	0.00	28.08	8.96	2.42	2.27	0.00	0.85	0.00	0.70	0.56
Sokoban	0.00	0.00	0.00	0.00	4.42	10.82	0.00	0.00	0.01	8.48	26.99	0.17	0.14
Thoughtful	0.00	0.00	0.00	0.00	3.42	23.02	0.00	0.00	0.00	8.24	4.62	10.21	1.58
Overall	0.001	0.01	0.01	15.77	76.65	80.16	7.56	8.91	3.95	45.25	59.29	11.73	2.57

Overall Time Metric Winner: PbP.s

Quality Metric Results

Systems Domains	Cabala	Dae1	Dae2	Macro AltAlt	Obtuse Wedge	PbP.s	Replica	Roller	Sayphi Rules	Wizard- FF	Wizard- SGP	RFA1	RFA2
GoldMiner	0.00	28.69	28.41	27.65	17.46	23.96	7.97	7.85	16.14	25.80	25.01	7.88	13.45
Matching BW	1.89	2.00	2.94	24.12	5.69	20.22	1.59	1.10	0.00	12.70	0.59	4.63	0.00
N-Puzzle	0.00	0.00	0.00	19.16	24.50	17.77	0.38	0.45	8.78	13.17	9.82	11.25	0.00
Parking	0.74	0.00	0.00	0.00	25.54	19.48	14.22	15.61	0.00	8.67	0.00	10.60	7.95
Sokoban	0.00	0.97	0.00	0.00	15.27	27.24	0.88	0.00	4.40	17.11	29.40	10.30	4.12
Thoughtful	0.00	0.00	0.00	0.00	6.62	18.01	0.00	0.00	0.00	13.76	16.30	19.28	10.19
Overall	2.63	31.66	31.35	70.92	95.07	126.68	25.05	25.02	29.32	91.21	81.12	63.93	35.70

Overall Quality Metric Winner: PbP.s

Success Rate (fraction of problems solved)

Systems Domains	Cabala	Dae1	Dae2	Macro AltAlt	Obtuse Wedge	PbP.s	Replica	Roller	Sayphi Rules	Wizard- FF	Wizard- SGP	RFA1	RFA2
GoldMiner	0.00	1.00	1.00	0.97	0.67	1.00	1.00	1.00	1.00	1.00	1.00	0.30	0.47
Matching BW	0.07	0.07	0.10	0.87	0.27	0.93	0.10	0.07	0.00	0.50	0.03	0.33	0.00
N-Puzzle	0.03	0.00	0.00	0.00	1.00	0.87	0.70	0.60	0.00	0.30	0.00	0.53	0.40
Parking	0.00	0.03	0.00	0.00	0.70	1.00	0.03	0.00	0.20	0.63	1.00	0.43	0.30
Sokoban	0.00	0.03	0.00	0.00	0.70	1.00	0.03	0.00	0.20	0.63	1.00	0.43	0.30
Thoughtful	0.00	0.00	0.00	0.00	0.27	0.97	0.00	0.00	0.00	0.47	0.57	0.67	0.40
Overall	0.02	0.18	0.18	0.42	0.65	0.93	0.32	0.31	0.26	0.57	0.51	0.47	0.26

Best Success Rate: PbP.s

Comparison of systems' overall performance before and after learning (top 8 shown)

System	Time Metric	Quality	Success Rate
PbP.s (no learning)	74.9	120.8	0.92
PbP.s	69.7	121.0	0.93
ObtuseWedge	61.4	91.2	0.65
Wizard-SGP	46.7	79.6	0.51
Wizard-FF	41.6	89.0	0.57
Wizard-SGP (no learning)	28.8	83.3	0.53
ObtuseWedge (no learning)	25.3	62.2	0.48
Wizard-FF (no learning)	20.2	106.3	0.63

PbP.s without learning is a top performer !

Compare the difference in performance before and after learning for top 5 (positive values means learning helped)

System	Delta Time Metric	Delta Quality Metric	Delta Success Rate
PbP.s	- 5.26	0.20	1
ObtuseWedge	36.05	29.02	17
Wizard-FF	21.42	- 17.33	- 6
Wizard-SGP	17.90	- 3.63	- 2
Macro-AltAlt	1.16	- 6.80	- 4

Best Learner Award: ObtuseWedge