

Table 1. Comparison of Exact and Interactive Symbolic Inference Approaches.

Benchmark	Type	Dataset	PSI	Mathem.	Maple	Hakaru
BurglarAlarm	D	full	●	●	●	●
ClinicalTrial1	DC	100/1000	●	–	–	××
CoinBias	DC	full	●	t/o	t/o	● ⁿ
DigitRecognition	D	full	●	–	–	×
Grass	D	full	●	●	××	●
HIV	C0	10/369	● ⁿ	–	–	–
LinearRegression1	C0	100/1000	● ^f	–	–	–
NoisyOr	D	full	●	●	●	●
SurveyUnbias	DC	full	● ⁿ	t/o	×	● ⁿ
TrueSkill	C	full	● ^f	t/o	t/o	● ⁿ
TwoCoins	D	full	●	●	●	●
AddFun/max	C	full	●	○	×	○
AddFun/sum	C	full	●	●	●	● ⁿ
BayesPointMachine	C	full	● ⁿ	t/o	t/o	● ⁿ
ClickGraph	DC	full	●	t/o	t/o	● ⁿ
ClinicalTrial2	DC	full	●	t/o	t/o	● ⁿ
Coins	D	full	●	●	××	●
Evidence/model1	D	full	●	○	××	●
Evidence/model2	D	full	●	●	××	●
LearningGaussian	C0	full	●	–	–	–
MurderMystery	D	full	●	●	●	●

Legend: **Type:** Discrete (D), Continuous (C), Zero-probability observations (0).
Dataset: Full (full) or the first a out of b inputs in a/b .
Tools: Fully simplified (●) Partially simplified (●), Not simplified (○),
Not normalized (●ⁿ, ●ⁿ), Remaining Integrals (●^f),
Incorrect (××), Crash (×), Timeout (t/o).