SOGA: Inference of Probabilistic Programs by Second-order Gaussian Approximation Reproducibility Report

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Table 6: Comparing ground truth and $SOGA$ with varying pruning factors K, calculated using PSI. Rows display absolute percentage errors ($|\%e|$) for different K, with C denoting components without pruning.

| | | $SOGA$ | | | | | | | | |
| | | $K=\infty$ | | | $K=\lceil.015C\rceil$ | | $K=\lceil.00725C\rceil$ | | $K=\lceil.003625C\rceil$ | |
Model	Ground Truth	time	$|\%e|$	C	time	$|\%e|$	time	$|\%e|$	time	$|\%e|$
Bernoulli	0.250	to		1954	to		to		to	
ClickGraph	0.614	to		4600	to		to		to	
ClinicalTrial	0.755	to		5795	to		to		to	
RadarQuery	6.333	to		2042	to		to		to	
Coinbias	0.421	to		7687	to		to		to	
Surveyunbias	0.625	to		6902	to		to		to	