## 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								
		<i>K</i> =∞			$K = \lceil .015C \rceil$		$K = \lceil .00725C \rceil$		$K = \lceil .003625C \rceil$	
Model	$Ground\ Truth$	time	%e	C	time	%e	time	%e	time	%e
Bernoulli	0.250	7.09	2.76	1954	1.69	2.76	0.69	2.73	1.35	2.98
ClickGraph	0.614	to		4600	57.34	0.02	1.87	0.02	12.65	0.31
ClinicalTrial	0.755	6.90	0.21	5795	18.53	0.21	1.14	0.21	3.05	0.20
RadarQuery	6.333	89.44	5.99	2042	22.60	8.89	3.08	6.31	8.45	7.48
Coinbias	0.421	10.17	1.40	7687	4.47	1.40	1.31	1.40	1.65	1.40
Surveyunbias	0.625	8.70	0.77	6902	9.38	0.77	1.21	0.78	4.20	0.77