

Table I. Median Normalized Time Results. Normalized time is the running time of each algorithm for a particular sample size and network divided by the corresponding running time of *MMHC*. The first term in the parentheses is the number of networks the algorithm terminated on and used in calculating the median for each algorithm and the second is the number of networks the algorithm hit the 2 day time threshold and was stopped. Median normalized time values smaller than one correspond to an algorithm with faster running times than *MMHC*. The \* reminds the reader that the Optimal Reinsertion (*OR*) algorithms running time was set to be 1 or 2 times that of *MMHC*. Also, recall the *GES* implementation did not contain all optimizations described by the original authors.

Algorithm	Median Normalized Times			Average Over SS
	500	1000	5000	
MMHC	1.00 (22/ 0)	1.00 (22/ 0)	1.00 (22/ 0)	1.00
OR1 k=5	1.18 (19/ 0)	1.15 (18/ 0)	1.12 (17/ 0)	1.15*
OR1 k=10	1.15 (19/ 0)	1.17 (18/ 0)	1.14 (16/ 0)	1.15*
OR1 k=20	1.18 (19/ 0)	1.18 (18/ 0)	1.13 (16/ 0)	1.16*
OR2 k=5	2.25 (19/ 0)	2.19 (18/ 0)	2.14 (16/ 0)	2.20*
OR2 k=10	2.32 (18/ 0)	2.17 (18/ 0)	2.13 (16/ 0)	2.21*
OR2 k=20	2.36 (18/ 0)	2.26 (18/ 0)	2.16 (16/ 0)	2.26*
SC k=5	5.99 (21/ 0)	6.51 (22/ 0)	4.68 (18/ 2)	5.73
SC k=10	9.37 (13/ 0)	11.69 (13/ 0)	7.82 (13/ 0)	9.63
GS	5.07 (20/ 2)	4.10 (20/ 2)	2.98 (20/ 2)	4.05
PC	1.87 (18/ 4)	1.69 (18/ 4)	1.29 (20/ 2)	1.62
TPDA	10.25 (21/ 1)	5.17 (21/ 1)	0.56 (22/ 0)	5.33
GES	341.20 ( 7/15)	135.65 ( 6/16)	33.46 ( 6/16)	170.10