Table 2: Average code coverage achieved by RuTeG and random testing (RT), with t-test where * indicates p < 0.05 and ** indicates p < 0.01; and the time to maximum coverage expressed in seconds. Project Method SLOC $\overline{\mathbf{CC}}$ Cov. RuTeG Cov. RT Time RuTeG Time RT Triangle 81% triangle_type 26 8 100% 99 59 100% 100% ISBN Checker valid_isbn10? 18 29 84 13 100% 100% 80 valid_isbn13? 34 AddressBook add_address 10 100% 100% 56 97 88% R.B.Tree 49 100% 68 92 rb insert Bootstrap bootstrapping 38 100% 86% 54 88 98% 92% 209 RubyStat 116 213 gamma RubyGraph bfs 39 12 100% 93% 79 86 dfs 34 10 100% 96% 70 72 26 100% 100% 155 warshall_flovd_shortest_paths 11 196

13

16

10

26

10.3

100%

100%

94%

88%

98.6%

92%

96%

74%

68%

90.4%

111

274

285

356

131.4

202

356

333

143

152.9

56

59

23

111

44.1

Ruby 1.8

RubvChess

TOTAL (Average):

rank

move

(power!)

canBlockACheck