

MNIST | top 20.0% | Num hops: log(n) 0.90 -FL|0.05|57.13% nodes FL|1|40.87% nodes Eff checker|FL|57.13% nodes Eff checker|FL|40.87% nodes Louv baseline|0.05 Louv baseline|1 Leiden baseline|0.05 Leiden baseline|1 0.85 FL ng|0.05|63.47% nodes FL ng|1|40.18% nodes Eff checker|FL ng|63.47% nodes Eff checker|FL ng|40.18% nodes FL ng prop|0.05|53.49% nodes FL ng prop|1|35.61% nodes Eff checker|FL ng prop|53.49% nodes Eff checker|FL ng prop|35.61% nodes 0.80 PageRank|0.05|71.76% nodes PageRank|1|49.5% nodes Eff checker|PageRank|71.76% nodes Eff checker|PageRank|49.5% nodes FL|0.25|49.83% nodes FL|1.5|39.07% nodes Eff checker|FL|49.83% nodes Eff checker|FL|39.07% nodes 0.75 Louv baseline|0.25 Louv baseline|1.5 Leiden baseline|0.25 Leiden baseline|1.5 FL ng|0.25|53.5% nodes FL ng|1.5|39.07% nodes Eff checker|FL ng|53.5% nodes Eff checker|FL ng|39.07% nodes 0.70 FL ng prop|0.25|44.42% nodes FL ng prop|1.5|33.65% nodes Eff checker|FL ng prop|44.42% nodes Eff checker|FL ng prop|33.65% nodes PageRank|0.25|63.74% nodes PageRank|1.5|45.35% nodes 0 Eff checker|PageRank|63.74% nodes Eff checker|PageRank|45.35% nodes Δ O 0.65 FL|0.5|45.26% nodes FL|5|32.16% nodes 0 Eff checker|FL|45.26% nodes Eff checker|FL|32.16% nodes Louv baseline|0.5 Louv baseline|5 Leiden baseline | 0.5 Leiden baseline|5 0.60 FL ng|0.5|45.95% nodes FL ng|5|31.44% nodes Eff checker|FL ng|45.95% nodes Eff checker|FL ng|31.44% nodes FL ng prop|0.5|39.49% nodes FL ng prop|5|29.39% nodes Eff checker|FL ng prop|39.49% nodes Eff checker|FL ng prop|29.39% nodes \Diamond 0.55 PageRank|0.5|57.55% nodes PageRank|5|34.72% nodes S Eff checker|PageRank|57.55% nodes Eff checker|PageRank|34.72% nodes 0.5 0.6 0.7 8.0 0.9 1.0 0.4

Purity









