Social Network Analysis Perakis Georgios DS3616014

Assignment 1: Part 2 Results.

Generating Graph with 50 Nodes of Out Degree: 7

Node: 4, Maximum Degree 28

Node with the Highest PageRank value:

Node: 4, PageRank value 0.0405096853025

Girvan-Newman community Detection Algorithm: Execution Time: 0.650333881378

Clauset-Newman-Moore community Detection Algorithm: Execution Time: 0.00019383430481

Generating Graph with 75 Nodes of Out Degree: 7

Node: 2, Maximum Degree 33

Node with the Highest PageRank value:

Node: 2, PageRank value 0.0301347536006

Girvan-Newman community Detection Algorithm: Execution Time: 2.45710802078

Clauset-Newman-Moore community Detection Algorithm: Execution Time: 9.79900360107e-05

Generating Graph with 100 Nodes of Out Degree: 7

Node: 6, Maximum Degree 48

Node with the Highest PageRank value:

Node: 6, PageRank value 0.0320276638227

Girvan-Newman community Detection Algorithm: Execution Time: 5.70694303513

Clauset-Newman-Moore community Detection Algorithm: Execution Time: 0.000108957290649

Generating Graph with 125 Nodes of Out Degree: 7

Node: 4, Maximum Degree 45

Node with the Highest PageRank value:

Node: 4, PageRank value 0.024006198352

Girvan-Newman community Detection Algorithm: Execution Time: 11.6389229298

Clauset-Newman-Moore community Detection Algorithm: Execution Time: 0.000117778778076

Generating Graph with 150 Nodes of Out Degree: 7

Node: 4, Maximum Degree 52

Node with the Highest PageRank value:

Node: 4, PageRank value 0.0229065223518

Girvan-Newman community Detection Algorithm: Execution Time: 20.0668561459

Clauset-Newman-Moore community Detection Algorithm: Execution Time: 0.000138998031616

Generating Graph with 175 Nodes of Out Degree: 7

Node: 7, Maximum Degree 66

Node with the Highest PageRank value:

Node: 7, PageRank value 0.024565594645

Girvan-Newman community Detection Algorithm: Execution Time: 32.9089009762

Clauset-Newman-Moore community Detection Algorithm: Execution Time: 0.000151872634888

Generating Graph with 200 Nodes of Out Degree: 7

Node: 3, Maximum Degree 65

Node with the Highest PageRank value:

Node: 3, PageRank value 0.0208981685961

Girvan-Newman community Detection Algorithm: Execution Time: 45.4376990795

Clauset-Newman-Moore community Detection Algorithm: Execution Time: 0.000167846679688

Generating Graph with 225 Nodes of Out Degree: 7

Node: 0, Maximum Degree 61

Node with the Highest PageRank value:

Node: 0, PageRank value 0.0174539951873

Girvan-Newman community Detection Algorithm: Execution Time: 66.0320718288

Clauset-Newman-Moore community Detection Algorithm: Execution Time: 0.000194787979126

Generating Graph with 250 Nodes of Out Degree: 7

Node: 2, Maximum Degree 61

Node with the Highest PageRank value:

Node: 2, PageRank value 0.0156419568717

Girvan-Newman community Detection Algorithm: Execution Time: 90.3249340057

Clauset-Newman-Moore community Detection Algorithm: Execution Time: 0.000180006027222

Generating Graph with 275 Nodes of Out Degree: 7

Node: 7, Maximum Degree 83

Node with the Highest PageRank value:

Node: 7, PageRank value 0.0193176377286

Girvan-Newman community Detection Algorithm: Execution Time: 128.184883118

Clauset-Newman-Moore community Detection Algorithm: Execution Time: 0.000226020812988

Generating Graph with 300 Nodes of Out Degree: 7

Node: 8, Maximum Degree 75

Node with the Highest PageRank value:

Node: 8, PageRank value 0.0159289576473

Girvan-Newman community Detection Algorithm: Execution Time: 167.575157166

Clauset-Newman-Moore community Detection Algorithm: Execution Time: 0.000226974487305

Generating Graph with 325 Nodes of Out Degree: 7

Node: 2, Maximum Degree 67

Node with the Highest PageRank value:

Node: 2, PageRank value 0.0133032052399

Girvan-Newman community Detection Algorithm: Execution Time: 228.06588912

Clauset-Newman-Moore community Detection Algorithm: Execution Time: 0.000236988067627

Generating Graph with 350 Nodes of Out Degree: 7

Node: 1, Maximum Degree 70

Node with the Highest PageRank value:

Node: 1, PageRank value 0.0125980933814

Girvan-Newman community Detection Algorithm: Execution Time: 313.873923063

Clauset-Newman-Moore community Detection Algorithm: Execution Time: 0.000262022018433

Generating Graph with 375 Nodes of Out Degree: 7

Node: 8, Maximum Degree 74

Node with the Highest PageRank value:

Node: 8, PageRank value 0.0124841145692

Girvan-Newman community Detection Algorithm: Execution Time: 379.73830986

Clauset-Newman-Moore community Detection Algorithm: Execution Time: 0.000389814376831

Generating Graph with 400 Nodes of Out Degree: 7

Node: 3, Maximum Degree 88

Node with the Highest PageRank value:

Node: 3, PageRank value 0.0138235311871

Girvan-Newman community Detection Algorithm: Execution Time: 477.072391987

Clauset-Newman-Moore community Detection Algorithm: Execution Time: 0.000433921813965

Generating Graph with 425 Nodes of Out Degree: 7

Node: 0, Maximum Degree 95

Node with the Highest PageRank value:

Node: 0, PageRank value 0.0141308323521

Girvan-Newman community Detection Algorithm: Execution Time: 480.996140003 Clauset-Newman-Moore community Detection Algorithm: Execution Time: 0.000272035598755

Generating Graph with 450 Nodes of Out Degree: 7

Node: 4, Maximum Degree 89

Node with the Highest PageRank value: Node: 4, PageRank value 0.0124090626676

Girvan-Newman community Detection Algorithm: Execution Time: 558.785588026

Clauset-Newman-Moore community Detection Algorithm: Execution Time: 0.000290155410767

Generating Graph with 475 Nodes of Out Degree: 7

Node: 6, Maximum Degree 111

Node with the Highest PageRank value: Node: 6, PageRank value 0.0146421503428

Girvan-Newman community Detection Algorithm: Execution Time: 671.083993196

Clauset-Newman-Moore community Detection Algorithm: Execution Time: 0.000293016433716