Results for Long QT BioConsert Project – February 2011

GS=Gold Standard, BI=Bioggle, IE= In Edge, PR = Page Rank and PC = Path Count

1. Using complete data sets

a. Rankings given as input

GS:=[[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14], [15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35]]

BI:=[[3], [1], [2], [8], [4], [11], [12, 9, 10], [7], [6, 27], [5], [26, 25], [13, 15], [20, 24], [34, 14], [32], [35, 28, 18, 19, 30, 29, 33, 22], [23, 21, 31], [17, 16]]

IE:=[[1, 12, 4, 2, 7, 3, 9, 11, 8, 10], [6, 27], [26, 20, 25, 32, 5, 24], [35, 28, 34, 23, 18, 14, 17, 16, 21, 13, 31, 19, 30, 29, 33, 22, 15]]

PR:=[[1], [2], [3], [8], [4], [11], [12, 7, 9, 10], [6], [5], [27], [28, 26, 18, 20, 14, 25, 24], [34, 13, 33, 15], [19], [35, 30, 29], [32], [23, 21, 22], [31], [17, 16]]

PC:=[[1, 12, 4, 2, 3, 9, 11, 8, 10], [7], [6, 27], [26, 25, 5], [32], [23, 20, 21, 13, 31, 24, 15], [35, 28, 34, 18, 14, 17, 16, 19, 30, 29, 33, 22]]

a. <u>Results</u>

Using BioConsert

Med5:= [[1, 2, 3], [8], [4], [11], [7, 9, 10, 12], [6, 27], [5], [20, 24, 25, 26], [32], [13, 15], [14, 18, 19, 22, 28, 29, 30, 33, 34, 35], [21, 23, 31], [16, 17]]

Distance to [BI,IE,PR,PC] = 352

Using Fagin's approach

Fagin 1:=[[1], [2], [3], [8], [4], [11], [9], [10], [12], [7], [6], [27], [5], [25], [26], [20], [24], [32], [13], [15], [14], [34], [18], [19], [28], [33], [29], [30], [35], [22], [21], [23], [31], [16], [17]];

Distance to [BI, IE, PR, PC] = 468

Fagin 2:=[[1],[2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35]];

Distance to [BI,IE,PR,PC] = 1875

Fagin3:= [[1], [2, 3, 4, 7, 8, 9, 10, 11, 12], [5, 6, 25, 27], [20, 24, 26, 32], [13, 14, 15, 34],

 $[18,\,19,\,28],\,[29,\,30,\,33,\,35],\,[21,\,22,\,23,\,31],\,[16,\,17]\,]$

Distance to [BI, IE, PR, PC] = 434

Considering reduced data sets gives the same results.