

**Results for ADHD
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, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45]]

BI:=[[7], [3, 2], [31, 41, 4, 5, 1], [8], [27, 43], [42], [40], [6], [17], [38], [20, 10, 11, 9, 30, 39, 16, 12, 14, 13, 23, 19, 22, 24], [21], [15], [29], [28, 36, 32, 45, 44, 35, 33, 37], [34, 25, 18, 26]]

IE:=[[7], [31, 41, 4, 5, 1, 3, 2], [8], [6, 17], [38, 42, 27, 43, 15, 40, 29], [20, 34, 28, 10, 25, 11, 9, 18, 30, 36, 39, 26, 32, 16, 12, 14, 13, 45, 44, 35, 33, 23, 37, 21, 19, 22, 24]]

PR:=[[7], [31, 41, 4, 5, 1, 2], [3], [27], [8], [42, 6, 43], [10, 11, 9, 38, 36, 39, 16, 12, 14, 13, 40, 44, 23, 19, 22], [17], [15, 45, 33, 24], [20, 30, 32, 29], [35, 37, 21], [28], [34, 25, 18, 26]]

PC:=[[7], [3, 2], [31, 41, 4, 5, 1], [8], [6], [27, 43, 17, 40], [15, 29], [34, 25, 18, 38, 42, 26, 21], [20, 28, 10, 11, 9, 30, 36, 39, 32, 16, 12, 14, 13, 45, 44, 35, 33, 23, 37, 19, 22, 24]]

b. Results

Using BioConsert

Med1:=[[7], [2, 3], [1, 4, 5, 31, 41], [8], [6], [27, 43], [42], [40], [17], [38], [15, 29], [9, 10, 11, 12, 13, 14, 16, 19, 20, 22, 23, 24, 28, 30, 32, 33, 35, 36, 37, 39, 44, 45], [21], [18, 25, 26, 34]]

Distance to [BI,IE,PR,PC] = 682

Using Fagin's approach

Fagin1:=[[7], [2], [3], [1], [4], [5], [31], [41], [8], [6], [27], [43], [17], [40], [42], [38], [15], [29], [9], [10], [11], [12], [13], [14], [16], [19], [22], [23], [39], [21], [24], [20], [30], [33], [36], [44], [45], [32], [28], [35], [37], [18], [25], [26], [34]];

Distance to [BI,IE,PR,PC] = 1165

Fagin2:=[[7],[1, 2, 3, 4, 5, 6, 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, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45]];

Distance to [BI,IE,PR,PC] =2839

Fagin3:=[[7], [1, 2, 3, 4, 5, 31], [6, 8, 27, 41, 43], [17], [15, 38, 40, 42], [9, 10, 29], [11], [12], [13, 14, 16], [19, 22, 23, 39], [20, 21, 24, 30, 32, 33, 36, 44, 45], [28], [18, 25, 26, 34, 35, 37]]];

Distance to [BI,IE,PR,PC] = 1072

2. Reduced data sets

a. Rankings given as input

GS_c:=[[1, 2, 3, 4, 5, 6, 7], [8, 17, 27, 31, 40, 41, 42, 43]]

BI_c:=[[7], [3, 2], [31, 41, 4, 5, 1], [8], [27, 43], [42], [40], [6], [17]]

IE_c:=[[7], [31, 41, 4, 5, 1, 3, 2], [8], [6, 17], [27, 40, 42, 43]]

PR_c:=[[7], [31, 41, 4, 5, 1, 2], [3], [27], [8], [42, 6, 43], [40], [17]]

PC_c:=[[7], [3, 2], [31, 41, 4, 5, 1], [8], [6], [17, 27, 40, 43], [42]]

b. Results

Using BioConsert

M1:=[[7], [2, 3], [1, 4, 5, 31, 41], [8], [6], [27, 43], [42], [40], [17]]];
Distance to [BI_c,IE_c,PR_c,PC_c] = 48

Using Fagin's approach

Fagin1:=[[7], [2], [3], [1], [4], [5], [31], [41], [8], [6], [27], [43], [42], [17], [40]]

Distance to [BI_c,IE_c,PR_c,PC_c] = 93

Fagin2:= [[7], [1, 2, 3, 4, 5, 6, 8, 17, 27, 31, 40, 41, 42, 43]]

Distance to [BI_c,IE_c,PR_c,PC_c] = 289

Fagin3:= [[7], [2, 3], [1, 4], [5, 6, 8, 31, 41], [17, 27, 42, 43], [40]]

Distance to [BI_c,IE_c,PR_c,PC_c] = 107