

Note: The normalized Adjacency matrix ( $B = D^{-1/2}AD^{-1/2}$ ) was used for better results.

Table 1: Cluster Mismatch Rates for Different Values of  $k$

Number of Clusters	Cluster No.	Cluster Size	Majority Label	Mismatch Rate	Overall Mismatch Rate
k=2	1	1222	1	0.4795	0.4804
	2	2	0	0.0	
k=5	1	79	0	0.0253	0.0507
	2	588	1	0.0255	
	3	471	0	0.0212	
	4	5	1	0.2	
	5	81	1	0.4198	
k=10	1	58	0	0.0345	0.0621
	2	366	1	0.0246	
	3	96	0	0.0208	
	4	42	0	0.119	
	5	41	0	0.439	
	6	7	1	0.4286	
	7	51	1	0.4706	
	8	324	0	0.0216	
	9	218	1	0.0229	
	10	21	0	0.0476	
k=30	1	4	0	0.0	0.0711
	2	25	1	0.0	
	3	43	0	0.0233	
	4	84	1	0.0595	
	5	18	0	0.2222	
	6	79	1	0.0633	
	7	46	0	0.0652	
	8	75	1	0.0533	
	9	40	1	0.4	
	10	25	0	0.0	
	11	53	0	0.0566	
	12	34	0	0.0	
	13	92	1	0.0652	
	14	38	0	0.0526	
	15	36	1	0.0833	
	16	49	1	0.0408	
	17	13	0	0.0	
	18	44	1	0.0227	
	19	17	0	0.4118	
	20	39	0	0.2308	
	21	78	0	0.0385	
	22	50	0	0.04	
	23	45	0	0.0222	
	24	80	1	0.05	
	25	6	0	0.3333	
	26	22	0	0.0	
	27	20	0	0.0	
	28	41	1	0.0488	
	29	25	0	0.08	
	30	3	0	0.0	

Number of Clusters	Cluster No.	Cluster Size	Majority Label	Mismatch Rate	Overall Mismatch Rate
k=50	1	4	0	0.0	0.0662
	2	39	0	0.0256	
	3	29	1	0.069	
	4	19	1	0.0	
	5	47	1	0.0	
	6	33	1	0.2121	
	7	9	0	0.0	
	8	19	1	0.0	
	9	20	0	0.0	
	10	31	0	0.2581	
	11	21	0	0.0476	
	12	49	1	0.0	
	13	30	0	0.0333	
	14	42	0	0.0	
	15	37	1	0.2432	
	16	39	1	0.0	
	17	35	1	0.1429	
	18	24	1	0.0	
	19	14	0	0.0714	
	20	12	0	0.0	
	21	36	0	0.0	
	22	35	1	0.0286	
	23	34	1	0.0	
	24	42	1	0.0	
	25	29	0	0.0345	
	26	25	0	0.08	
	27	17	0	0.2353	
	28	4	1	0.0	
	29	15	1	1.0	
	30	15	0	0.3333	
	31	10	0	0.0	
	32	32	0	0.0	
	33	19	0	0.0	
	34	10	0	0.0	
	35	22	0	0.4091	
	36	23	1	0.087	
	37	14	0	0.0	
	38	22	1	0.2273	
	39	17	1	0.0588	
	40	8	1	0.0	
	41	17	1	0.0588	
	42	50	0	0.04	
	43	9	1	0.1111	
	44	4	0	0.0	
	45	37	0	0.0811	
	46	25	0	0.0	
	47	18	1	0.1667	
	48	18	0	0.0556	
	49	43	1	0.0465	
	50	21	1	0.1429	