Random swap algorithm experiment

Experiment was performed using random swap algorithm with parameters maxSwaps = 30 and k-means iteration limit = 2. Each dataset was calculated 100 times. The table contains average values of specified measure.

Dataset	TSE	MSE	Accepted Swaps	Time (seconds)	CI	Success rate
a1	14487898850.71	4829299.62	5.17	12.21	0.85	29 %
a2	26149204042.40	4980800.77	6.63	36.72	2.29	0 %
a3	39873516115.36	5316468.82	7.75	72.83	3.90	0 %
s1	11136443442788.50	2227288688.56	4.87	11.46	0.44	56 %
s2	14701661953973.70	2940332390.79	3.68	12.29	0.35	65 %
s3	17867515062604.10	3573503012.52	2.67	17.56	0.39	61 %
s4	16376191987258.70	3275238397.45	1.27	20.59	0.48	54 %
dim032	16109951.60	15732.37	0.55	3.28	3.63	0 %
unbalanced	289902442178.86	44600375.72	6.79	16.56	0.30	70 %

Source code

File randomSwap.m contains the main randomSwap algorithm. This uses kmeans implementation that can be found in file ownKmeans.m. The file test.m was used to perform the measurements.

Filip Zachar