

COMP41450 NMF Assignment - Sample Output

Below shows sample output for Euclidean NMF when applied to the *bbcnews* data set. The output shown in the top 10 terms for each cluster, for k=2 to k=6 clusters. Note that, due to random initialisation, your results may differ somewhat. However, they should be broadly similar with regard to the topics that you are finding in the data set.

Sample: k=2 clusters

Rank	Cluster 1	Cluster 2
1	labour	technology
2	government	digital
3	election	music
4	party	mobile
5	blair	video
6	minister	users
7	howard	games
8	tax	people
9	tory	game
10	secretary	players

Sample: k=3 clusters

Rank	Cluster 1	Cluster 2	Cluster 3
1	labour	technology	game
2	government	digital	england
3	election	music	ireland
4	party	mobile	side
5	blair	users	win
6	minister	video	wales
7	howard	software	team
8	tax	people	cup
9	tory	phone	victory
10	secretary	tv	rugby

Sample: k=4 clusters

Rank	Cluster 1	Cluster 2	Cluster 3	Cluster 4
1	digital	labour	users	game
2	mobile	government	software	england
3	music	election	web	ireland
4	video	party	security	side
5	technology	blair	net	win
6	devices	minister	sites	wales
7	tv	howard	computer	team
8	sony	tax	site	cup
9	consumer	tory	microsoft	victory
10	market	secretary	information	rugby

Sample: k=5 clusters

Rank	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5
1	game	labour	oil	users	digital
2	england	party	economy	software	music
3	ireland	election	growth	security	mobile
4	side	blair	yukos	web	video
5	win	government	bank	sites	technology
6	wales	howard	economic	email	tv
7	team	tory	company	site	devices
8	cup	tories	market	net	sony
9	victory	secretary	shares	microsoft	content
10	rugby	minister	rise	windows	gaming

Sample: k=6 clusters

Rank	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Cluster 6
1	users	labour	oil	digital	game	law
2	software	election	yukos	mobile	england	suspects
3	web	party	economy	music	ireland	rights
4	security	howard	growth	video	side	terror
5	net	blair	bank	technology	win	human
6	sites	tories	company	tv	wales	trial
7	site	tory	shares	devices	cup	lords
8	email	brown	economic	sony	team	clarke
9	microsoft	tax	market	gaming	victory	lord
10	information	leader	russian	portable	rugby	powers