

Honey Nut Clusters

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The data that we will use is Wikipedia dumps. We have already downloaded the latest complete English Wikipedia dump that totals (when extracted) to 37.7GB. Figure/Table 1 shows the word frequency for the top twenty words and Zipf's curve of the entire Wikipedia file.

Because Wikipedia contains so many articles, our initial goal of performing hierarchical clustering on the entire Wikipedia might be unrealistic. Also because of the size we would have to store it on disk making the entire process of analyzing it extremely slow. Because of this we used Wikipedia's Special::Export tool to download a 13MB XML file that contains around 1500 articles. The articles downloaded are based on science, engineering, computer, mathematics and other science related categories. We will use this small file for testing purposes. Figure/Table 2 shows the word frequency for the top twenty words and Zipf's curve of this small file. By using only a small subset of Wikipedia we should be able to keep everything in RAM, speeding up the entire program, and only requiring the tf-idf vectors to be saved on disk.

We are making a modification to our Project by only using a smaller subset of Wikipedia. Instead of allowing users to browse through the entire Wikipedia we are going to focus more Wikipedia articles that are relevant to college students.

Table 1

the	160910158		the	82678
of	102109943		of	57403
and	67048607		and	37979
in	66568469		to	28094
to	59590186		in	27742
is	29245795		is	23908
for	25508367		for	12271
on	21745345		that	11434
was	21133251		as	10965
as	19790864		by	9397
by	18485800		are	9164
that	16723028		be	8373
with	16702919		with	7827
it	16119454		or	7752
from	14528676		on	7088
at	13255091		an	7033
this	12873397		this	6281
be	11240966		it	6021
he	10847206		from	5225
an	10842524		can	5223

Table 2

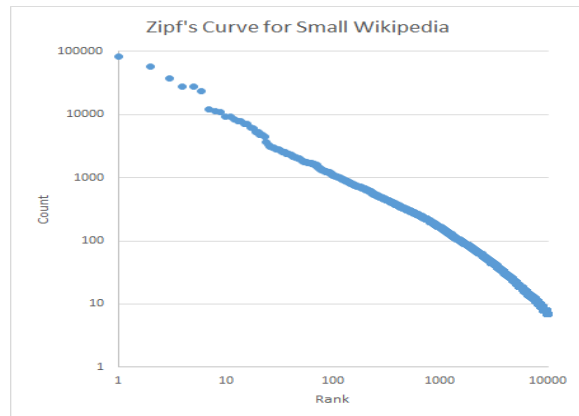


Figure 1

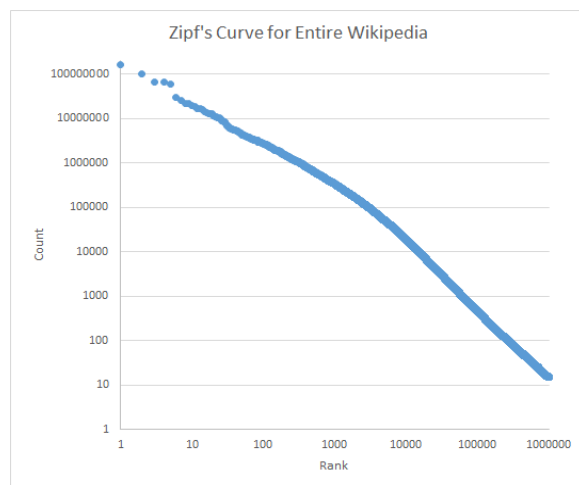


Figure 2