

Text Visualization

Creating Bag Of Words Model

Text Visualization

“It is going to rain today”

“Today I am not going outside”

“I am going to watch the season premiere”

Bag Of Words – Lower the sentences

“it is going to rain today”

“today i am not going outside”

“i am going to watch the season premiere”

Bag Of Words – Tokenization

Sentence 1

it
is
going
to
rain
today

Sentence 2

today
i
am
not
going
outside

Sentence 3

i
am
going
to
watch
the
season
premiere

Bag Of Words – Histogram

Word	Count
it	1

Sentence 1

it

is

going

to

rain

today

Bag Of Words – Histogram

Word	Count
it	1
is	1

Sentence 1

it
is
going
to
rain
today

Bag Of Words – Histogram

Word	Count
it	1
is	1
going	1

Sentence 1

it

is

going

to

rain

today

Bag Of Words – Histogram

Word	Count
it	1
is	1
going	1
to	1

Sentence 1

it

is

going

to

rain

today

Bag Of Words – Histogram

Word	Count
it	1
is	1
going	1
to	1
rain	1

Sentence 1

it

is

going

to

rain

today

Bag Of Words – Histogram

Word	Count
it	1
is	1
going	1
to	1
rain	1
today	1

Sentence 1

it

is

going

to

rain

today

Bag Of Words – Histogram

Word	Count
it	1
is	1
going	1
to	1
rain	1
today	1

Sentence 2

today

i

am

not

going

outside

Bag Of Words – Histogram

Word	Count
it	1
is	1
going	1
to	1
rain	1
today	2

Sentence 2

today

i

am

not

going

outside

Bag Of Words – Histogram

Word	Count
it	1
is	1
going	1
to	1
rain	1
today	2
i	1

Sentence 2

today

i

am

not

going

outside

Bag Of Words – Histogram

Word	Count
it	1
is	1
going	1
to	1
rain	1
today	2
i	1
am	1

Sentence 2

today

i

am

not

going

outside

Bag Of Words – Histogram

Word	Count
it	1
is	1
going	1
to	1
rain	1
today	2
i	1
am	1
not	1

Sentence 2

today

i

am

not

going

outside

Bag Of Words – Histogram

Word	Count
it	1
is	1
going	2
to	1
rain	1
today	2
i	1
am	1
not	1

Sentence 2

today

i

am

not

going

outside

Bag Of Words – Histogram

Word	Count
it	1
is	1
going	2
to	1
rain	1
today	2
i	1
am	1
not	1
outside	1

Sentence 2

today

i

am

not

going

outside

Bag Of Words – Histogram

Word	Count	Word	Count
it	1		
is	1		
going	2		
to	1		
rain	1		
today	2		
i	2		
am	1		
not	1		
outside	1		

Sentence 3

i
am
going
to
watch
the
season
premiere

Bag Of Words – Histogram

Word	Count	Word	Count
it	1		
is	1		
going	2		
to	1		
rain	1		
today	2		
i	2		
am	2		
not	1		
outside	1		

Sentence 3

i
am
going
to
watch
the
season
premiere

Bag Of Words – Histogram

Word	Count	Word	Count
it	1		
is	1		
going	3		
to	1		
rain	1		
today	2		
i	2		
am	2		
not	1		
outside	1		

Sentence 3

i
am
going
to
watch
the
season
premiere

Bag Of Words – Histogram

Word	Count	Word	Count
it	1		
is	1		
going	3		
to	2		
rain	1		
today	2		
i	2		
am	2		
not	1		
outside	1		

Sentence 3

i
am
going
to
watch
the
season
premiere

Bag Of Words – Histogram

Word	Count	Word	Count
it	1	watch	1
is	1		
going	3		
to	2		
rain	1		
today	2		
i	2		
am	2		
not	1		
outside	1		

Sentence 3

i
am
going
to
watch
the
season
premiere

Bag Of Words – Histogram

Word	Count	Word	Count
it	1	watch	1
is	1	the	1
going	3		
to	2		
rain	1		
today	2		
i	2		
am	2		
not	1		
outside	1		

Sentence 3

i
am
going
to
watch
the
season
premiere

Bag Of Words – Histogram

Word	Count	Word	Count
it	1	watch	1
is	1	the	1
going	3	season	1
to	2		
rain	1		
today	2		
i	2		
am	2		
not	1		
outside	1		

Sentence 3

i
am
going
to
watch
the
season
premiere

Bag Of Words – Histogram

Word	Count	Word	Count
it	1	watch	1
is	1	the	1
going	3	season	1
to	2	premiere	1
rain	1		
today	2		
i	2		
am	2		
not	1		
outside	1		

Sentence 3

i
am
going
to
watch
the
season
premiere

Bag Of Words – Sort the Histogram

Word	Count	Word	Count
it	1	watch	1
is	1	the	1
going	3	season	1
to	2	premiere	1
rain	1		
today	2		
i	2		
am	2		
not	1		
outside	1		

Bag Of Words – Sort the Histogram

Word	Count	Word	Count

Bag Of Words – Sort the Histogram

Word	Count	Word	Count
it	1	watch	1
is	1	the	1
going	3	season	1
to	2	premiere	1
rain	1		
today	2		
i	2		
am	2		
not	1		
outside	1		

Bag Of Words – Sort the Histogram

Word	Count	Word	Count
going	3		

Maximum: going

Bag Of Words – Sort the Histogram

Word	Count	Word	Count
it	1	watch	1
is	1	the	1
going	3	season	1
to	2	premiere	1
rain	1		
today	2		
i	2		
am	2		
not	1		
outside	1		

Bag Of Words – Sort the Histogram

Word	Count	Word	Count
going	3		
to	2		

Maximum: to

Bag Of Words – Sort the Histogram

Word	Count	Word	Count
going	3		
to	2		
today	2		

Maximum: today

Bag Of Words – Sort the Histogram

Word	Count	Word	Count
going	3		
to	2		
today	2		
i	2		

Maximum: i

Bag Of Words – Sort the Histogram

Word	Count	Word	Count
going	3		
to	2		
today	2		
i	2		
am	2		

Maximum: am

Bag Of Words – Sort the Histogram

Word	Count	Word	Count
going	3	watch	1
to	2	the	1
today	2	season	1
i	2	premiere	1
am	2		
it	1		
is	1		
rain	1		
not	1		
outside	1		

Bag Of Words – Filter words

Word	Count	Word	Count
going	3	watch	1
to	2	the	1
today	2	season	1
i	2	premiere	1
am	2		
it	1		
is	1		
rain	1		
not	1		
outside	1		

10 most frequent words

Bag Of Words – Filter words

Word	Count
going	3
to	2
today	2
i	2
am	2
it	1
is	1
rain	1
not	1
outside	1

Bag Of Words – Creating the matrix

Word	Count
going	3
to	2
today	2
i	2
am	2
it	1
is	1
rain	1
not	1
outside	1

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1										
2										
3										

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1										
2										
3										

it is going to rain today

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1									
2										
3										

it is going to rain today

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1								
2										
3										

it is going to rain today

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1							
2										
3										

it is going to rain today

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0						
2										
3										

it is going to rain today

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0					
2										
3										

it is going to rain today

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0	1				
2										
3										

it is going to rain today

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0	1	1			
2										
3										

it is going to rain today

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0	1	1	1		
2										
3										

it is going to rain today

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0	1	1	1	0	
2										
3										

it is going to rain today

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0	1	1	1	0	0
2										
3										

it is going to rain today

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0	1	1	1	0	0
2	1									
3										

today i am not going outside

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0	1	1	1	0	0
2	1	0								
3										

today i am not going outside

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0	1	1	1	0	0
2	1	0	1							
3										

today i am not going outside

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0	1	1	1	0	0
2	1	0	1	1						
3										

today i am not going outside

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0	1	1	1	0	0
2	1	0	1	1	1					
3										

today i am not going outside

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0	1	1	1	0	0
2	1	0	1	1	1	0				
3										

today i am not going outside

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0	1	1	1	0	0
2	1	0	1	1	1	0	0			
3										

today i am not going outside

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0	1	1	1	0	0
2	1	0	1	1	1	0	0	0		
3										

today i am not going outside

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0	1	1	1	0	0
2	1	0	1	1	1	0	0	0	1	
3										

today i am not going outside

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0	1	1	1	0	0
2	1	0	1	1	1	0	0	0	1	1
3										

today i am not going outside

Bag Of Words – Creating the matrix

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0	1	1	1	0	0
2	1	0	1	1	1	0	0	0	1	1
3	1	1	0	1	1	0	0	0	0	0

i am going to watch the season premiere

Bag Of Words – Model Ready

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0	1	1	1	0	0
2	1	0	1	1	1	0	0	0	1	1
3	1	1	0	1	1	0	0	0	0	0

Text Visualization

“It is going to rain today”

“Today I am not going outside”

“I am going to watch the season premiere”

Bag Of Words – Model Ready

Words/Documents	going	to	today	i	am	it	is	rain	not	outside
1	1	1	1	0	0	1	1	1	0	0
2	1	0	1	1	1	0	0	0	1	1
3	1	1	0	1	1	0	0	0	0	0