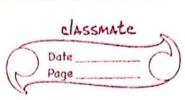
	Page
	Lagriguage Models:-
	a probabilities
	The goal of probabilistic Language Modelling is to calculate the probability of the sentence of words.  Sentence of words.  P(W)=P(w1) w2,, wn)
	is to come 2 sequence of words
	sentence
	P(W)=P(U)
	be used to find the
	This can be used to find the next word in the sequence.
	word in the sequence.
	$P(\omega_5 \omega_1,\omega_2,\omega_3,\omega_4)$ .
	and the second s
_	General Rule for P(A B) = P(ANB)
	$\mathcal{C}(\mathcal{B})$
-	[Probubility of Agiven B]
	Cornerally the formula is:-
	Generally the formula is:- P(x1) 22, xn) = P(x1) P(2/21)P(2/21/21)P(2/21/21)P(2/21/21)P(2/21/21)P(2/21/21/21/21/21/21/21/21/21/21/21/21/21
->	P(n, n2, nn) = IT P(n;   n, n, n; -1)
4	i 1
	S= "the office is so awesome"
+	
	P(MS)=P(+he) * P(office   the) * P(is   the office)
	(S)-P(TM)-1 (office   1-)

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	has the Markon
	So, a Stochastic process has the Markon property if the Conditional probability
-,	broberty if the Condination of the
-,~	property if the conditioned of the distribution of future states of the distribution of future only upon the present
~	distribution of future state upon the present process depends only upon the present
-	state, not on the sequence of events the
,	
1	A brocess with such proposition
3	known as Makov process.
	In simple terms the probability of
	nent woul can be estimated given
~	only the previous K words
<u>-</u>	Let   K = 1,
-~ <u></u>	P (awesome the office is so) &
<u>-</u>	P(awesome So)
~ <u> </u>	i+ K=2
- Company	States and the state of
~~ <u></u>	P (awesome   the office is so)
~~	1 11:00 13 30)
~	2 P(awesome is so)
	E Basically we as all to
	what is III
- 199 440 L	word is "accesome" given become
	102 Non
<u>-</u>	



	Page
	From Markov assumptions we can findly have the N-Gram Models
	findly have the N-Giram Models
-	P(\omegai   \omega_1,, \omega_{i-1}) \pi P(\omega_i   \omega_i - (n-1) \omega_{i-1})
-	Unigram Model (K=1)
	$P(\omega_1, \omega_2, \omega_n) \approx \prod_i P(\omega_i)$
	Bigram Model (K=2)
	$P(\omega_i \omega_i\omega_i\omega_{i-1})\approx P(\omega_i \omega_{i-1})$
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10 No.	BG P(Wi Wi-1) = Count (1)
	we can extend the equition for 4,5,6,
	gram ad so on.
	up will use this apprach to build a
	Longuye Model.