

[lr:tokenization]Tokenization
 [lr:wordrep]Words
 Rep-
 sen-
 taion
 [lr:ml]Machine
 Learn-
 ing
 [lr:oversampling]Oversampling
 [lr:lm]Language
 Mod-
 els
 [lr:evalmetrics]Evaluation
 Met-
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 Hazm
 NLTK
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 Trem
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 quency
 (TF):
 TF
 TF
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$$tf\left(t,D\right)=\frac{f_{t,d}}{\sum_{t'\in d}f_{t',d}}$$

(1)
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 (idf):
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$$idf\left(t,D\right)=\log\frac{N}{|\{d\in D,t\in d\}|}$$

(2)
 TF
 idf
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$$tf-idf\left(t,d,D\right)=tf\left(t,D\right).idf\left(t,D\right)$$

(3)
 ?
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$$P\left(y|X\right)=\frac{P(X|y).P(X)}{P(y)}$$

$$\frac{P(X|y)}{P(X)}$$

$$p\left(x=v|C_k\right)=\frac{1}{\sqrt{2\pi\sigma_k^2}}e^{-\frac{\left(\epsilon-\mu_k\right)^2}{2\mu_k^2}}$$

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