☰ **Menu**

Naive Bayes Introduction

To build a classifier, we will first start by creating conditional probabilities given the following table:

word	Pos	Neg
I	3	3
am	3	3
happy	2	1
because	1	0
learning	1	1
NLP	1	1
sad	1	2
not	1	2
N_{class}	13	12

Positive tweets
I am happy because I am learning NLP
I am happy, not sad.

Negative tweets
I am sad, I am not learning NLP
I am sad, not happy

This allows us compute the following table of probabilities:

word	Pos	Neg
I	0.24	0.25
am	0.24	0.25
happy	0.15	0.08
because	0.08	0
learning	0.08	0.08
NLP	0.08	0.08
sad	0.08	0.17
not	0.08	0.17

Once you have the probabilities, you can compute the likelihood score as follows