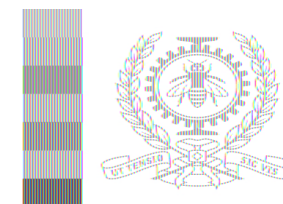


ML Testing

Laboratoire 4

Département de génie informatique et de génie logiciel
École Polytechnique de Montréal



**POLYTECHNI
MONTREAL**

Task 1 - start over again

- Let's get a more complex model a model using bigrams aka pairs of words thus
 - w1 w2 w3 w4 w5 generates
 - w1w2 w2w3 w3w4 w4w5
 - hint: ***CountVectorizer(ngram_range=(1, 2), min_df=min_freq)***
- Repeat all the tasks 1-11 from lab 3 the goal is indeed to decide if it worths using bigrams or unigrams are just fine
- for example compare confusion matrices, accuracy and AUC with dictionary size
- how about time ?

Task 2 - metamorphic properties

- Let's assume we use using bigrams aka pairs of words
- What metamorphic properties are still valid?
- Can we still randomly reorder words?
- Can we still shift all counter by 1?