# Bag of words with Bayesian Network to detect languages

Santiago E. Bocel
Universidad Rafael Landívar
Guatemala City, Guatemala
santiagobocel10@gmail.com

Brenner Hernandez
Universidad Rafael Landívar
Guatemala City, Guatemala
velasquezbrenner@gmail.com

Pablo Muralles
Universidad Rafael Landívar
Guatemala City, Guatemala
pablomuralles28@gmail.com

Roberto Solares
Universidad Rafael Landívar
Guatemala City, Guatemala
betosolaresgar@gmail.com

## ABSTRACT

Something as background

## CCS CONCEPTS

• **Computing methodologies** → **Bayesian network models**.

## KEYWORDS

bag of words, bayesian network

**ACM Reference Format:**
Santiago E. Bocel, Brenner Hernandez, Pablo Muralles, and Roberto Solares. 2021. Bag of words with Bayesian Network to detect languages. In *Proceedings of ACM Conference (Conference'17).* ACM, New York, NY, USA, 1 page. https://doi.org/10.1145/nnnnnnn.nnnnnnn

## 1 INTRODUCTION

Text classification is one of the applications of Machine Learning and consists of cataloging the texts based on their content, that is, performing an analysis of the words to decide what type of text is being identified.

This work is ideal for a machine as they are ideal for processing large amounts of information. However, since the machine does not initially know how to catalog a text based on any criteria, it requires a learning process in advance.

## REFERENCES

[1] AshishSingh Bhatia and Bostjan Kaluza. 2018. *Machine Learning in Java.* Packt, Birmingham, Uk.

[2] Tony F. Chan, Gene H. Golub, and Randall J. LeVeque. 1979. Updating the formula and a pairwise algorithm for computing sample variaces. Technical report. Stanford University.

[3] Praveen Dubey. [n. d.] An introduction to bag of words and how to code it in python for nlp. https://www.freecodecamp.org/news/an-introduction-to-bag-of-words-and-how-to-code-it-in-python-for-nlp-282e87a9da04/.

[4] Srinivas Gurrala. [n. d.] Implementation of bag of words using python. https://www.excelr.com/blog/data-science/natural-language-processing/implementation-of-bag-of-words-using-python.

[5] Michael Lanham. 2020. *Practical AI on the Google Cloud Platform.* Jonathan Hassell, editor. (1st. edition). O'Reilly Media, California.

[6] Rajat Mehta. 2017. *Big data analytics with Java.* Packt, Birmingham, Uk.

[7] @timleathart. [n. d.] How to handle a zero factor in naive bayes classifier calculation? https://datascience.stackexchange.com/questions/15526/how-to-handle-a-zero-factor-in-naive-bayes-classifier-calculation.


*Conference'17, July 2017, Washington, DC, USA*

ACM ISBN 978-x-xxxx-xxxx-x/YY/MM…$15.00
https://doi.org/10.1145/nnnnnnn.nnnnnnn