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 pablomuralles28@gmail.com betosolaresgar@gmail.com

Pablo Muralles Universidad Rafael Landívar

Guatemala City, Guatemala

Roberto Solares Universidad Rafael Landívar Guatemala City, Guatemala

ABSTRACT

Something as background

CCS CONCEPTS

• Computing methodologies → Bayesian network models.

KEYWORDS

bag of words, bayesian network

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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.
- 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-tocode-it-in-python-for-nlp-282e87a9da04/.

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- Srinivas Gurrala. [n. d.] Implementation of bag of words using python. https://www.excelr.com/blog/data-science/naturallanguage - processing / implementation - of - bag - of - words using-python.
- Michael Lanham. 2020. Practical AI on the Google Cloud Platform. Jonathan Hassell, editor. (1st. edition). O'Reilly Media, California.
- Rajat Mehta. 2017. Big data analytics with Java. Packt, Birmingham, Uk.
- @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-innaive-bayes-classifier-calculation.