Top2Vec

Distributed Representations of Topics

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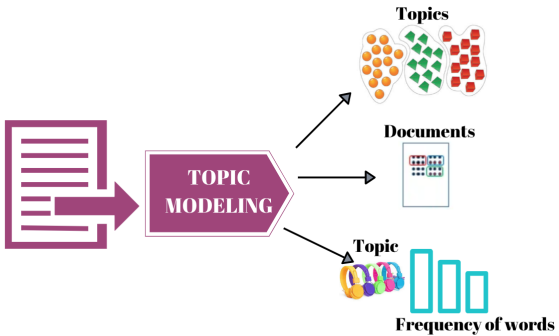
Introduction



Topic modeling is often used when a large collection of text cannot be reasonably read and sorted through by a person. Topic model will discover

- Latent semantic structure.
- Distribution of topics.
- Frecuency of topics.

Introduction

Traditional Topic Modeling Methods

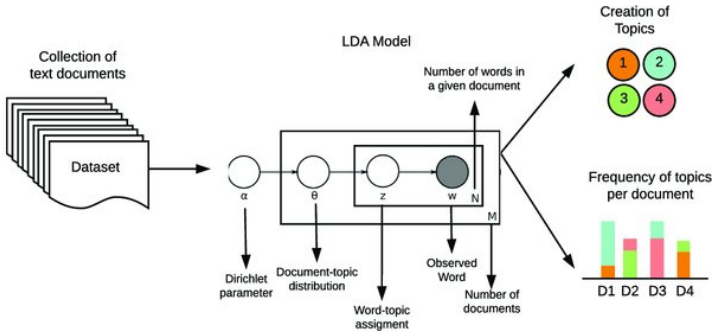


Figure 1: LDA representation [1].

Introduction

Traditional Topic Modeling Methods

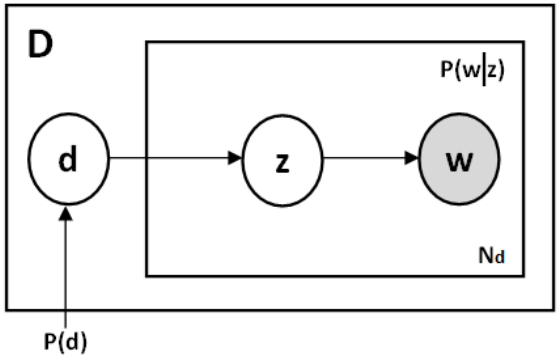


Figure 2: PLSA representation [2].

Introduction

Distributed Representations of Words and Documents

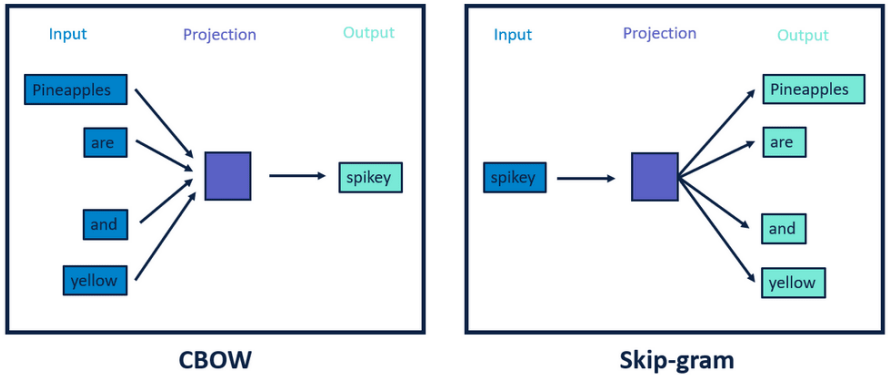


Figure 3: PLSA representation [2].

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Distributed Representations of Topics

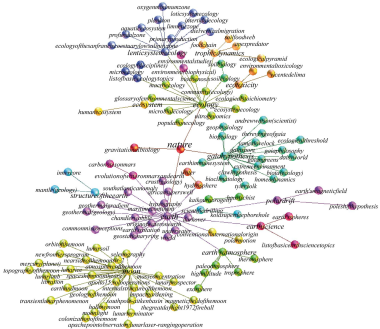

Figure 4: semantic space [3].

Model description

Create Semantic Embedding

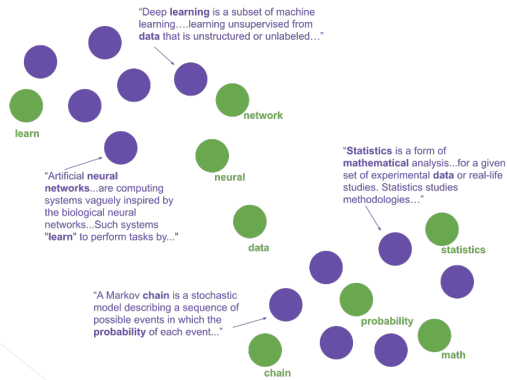

Figure 5: semantic space [4].

Model description

Find Number of Topics

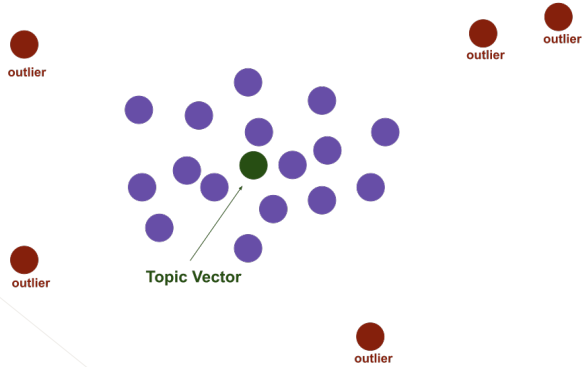

Figure 6: Topic subspace [4].

Model description

Low Dimensional Document Embedding

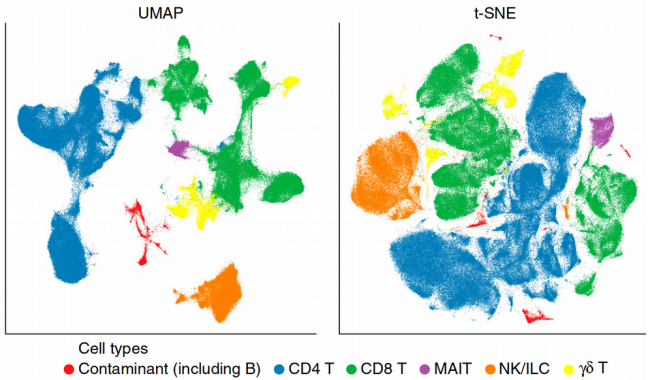

Figure 7: UMAP vs T-SNE [5].

Model description

Find Dense Clusters of Documents

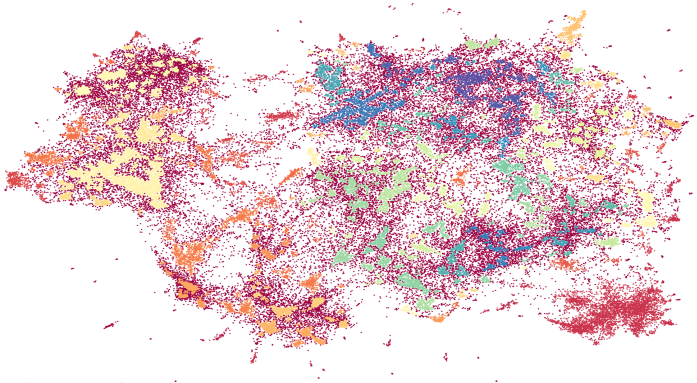

Figure 8: UMAP vs T-SNE [4].

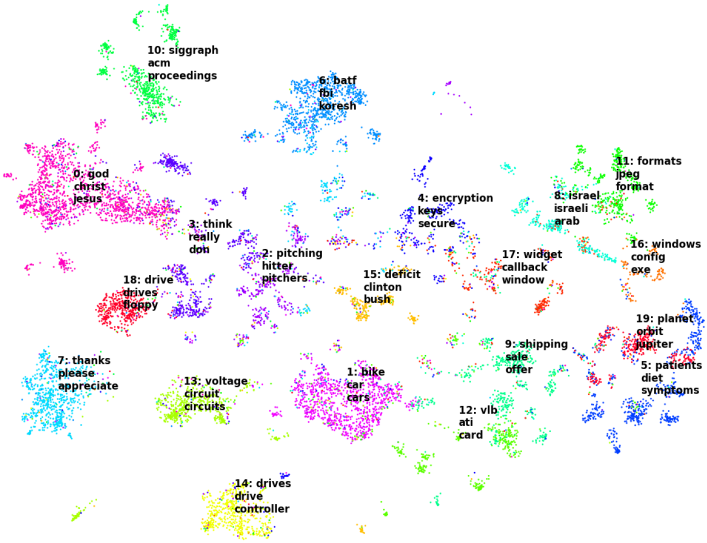

Figure 9: Semantic space for 20 News Dataset.

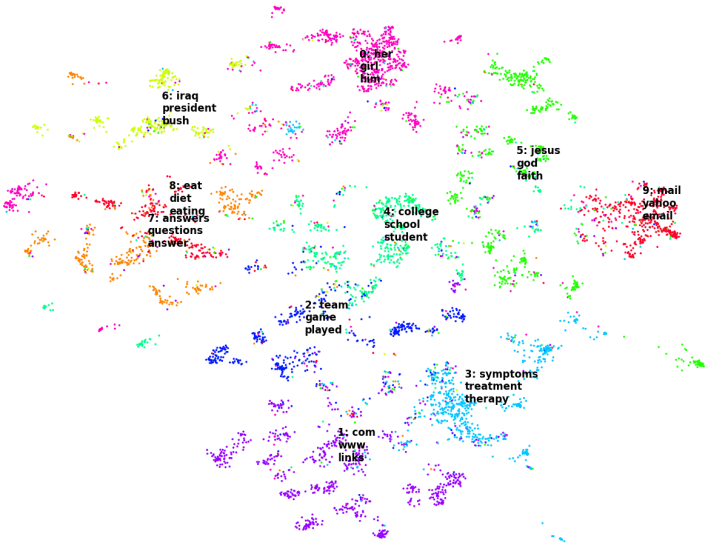

Figure 10: Semantic space for Yahoo Answers.

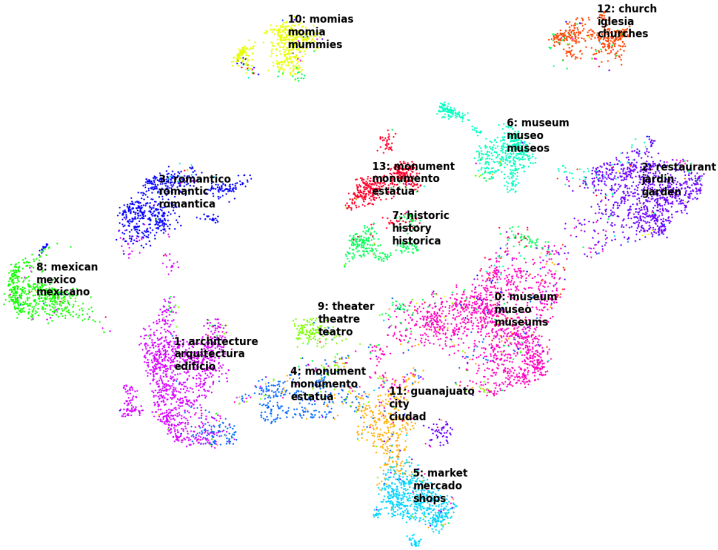

Figure 11: Semantic space for Tripadvisor.

Code

https://github.com/giovannilopez9808/Natural_Language_Processing_Proyecto

References I

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