Word2vec

A story of how Rishabh's mind was blown

Backstory



Picture taken from Kaggle

Also from Kaggle

item_condition_id

category_name

train_id

name

MLB

0	Cincinnati Reds T Shirt Size XL	3	Men/Tops/T-shirts		10	1	No description yet
1	Razer BlackWidow Chroma Keyboard	3	Electronics/Computers & Tablets/Components & Parts	Razer	52	0	This keyboard is in great condition and works like it came out of the box. All of the ports are tested and work perfectly. The lights are customizable via the Razer Synapse app on your PC.
2	AVA-VIV Blouse	1	Women/Tops & Blouses/Blouse	Target	10	1	Adorable top with a hint of lace and a key hole in the back! The pale pink is a 1X, and I also have a 3X

brand_name

shipping

price

item_description

available in white!

How do we parse the Names and Descriptions?

-NLP with Neural Networks?

-CS 224n

-Rishabh learns about word2vec

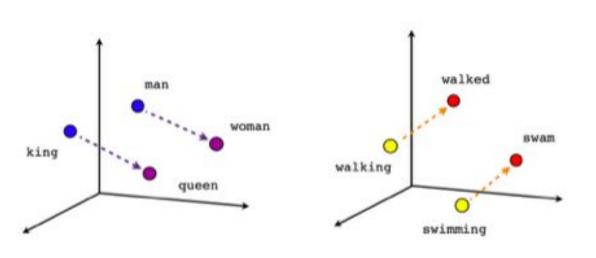
Word2Vec Description

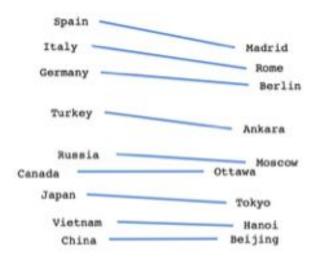
General Idea

Words are vectors

Dot products should indicate how likely words appear close to each other

Generated randomly and adjusted via gradient descent via backprop





Male-Female Verb tense

https://www.tensorflow.org/tutorials/word2vec

Country-Capital

- Geopolitics: Iraq Violence = Jordan
- Distinction: Human Animal = Ethics
- President Power = Prime Minister
- Library Books = Hall
- Analogy: Stock Market ≈ Thermometer

https://deeplearning4j.org/word2vec.html

Uses

- *Text prediction
- *Use with Neural Networks
 - -Sentiment Analysis
 - -Grammar
 - -Translations
 - -Mercari Price Suggestion!

Discussion/Questions