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N-Grams Overview

N-grams are fundamental and give you a foundation that will allow you to understand more complicated models in the specialization. These models allow you to calculate probabilities of certain words happening in a specific sequence. Using that, you can build an auto-correct or even a search suggestion tool.

Other applications of N-gram language modeling include:

Speech recognition

P(I saw a van) > P(eyes awe of an)

Spelling correction

“He entered the ship to buy some groceries” - “ship” a dictionary word
- P(entered the shop to buy) > P(entered the ship to buy)

Augmentative communication

Predict most likely word from menu for people unable to physically talk or sign.
(Newell et al., 1998)

This week you are going to learn to:

- Process a text corpus to N-gram language model
- Handle out of vocabulary words
- Implement smoothing for previously unseen N-grams
- Language model evaluation