ACM AI PRESENTS

Intro to NLP

& Twitter Sentiment Analysis

RULE-BASED CLASSIFIER

A classifier that is based on a set of user-defined rules (doesn't use machine learning)

BAG OF WORDS MODEL

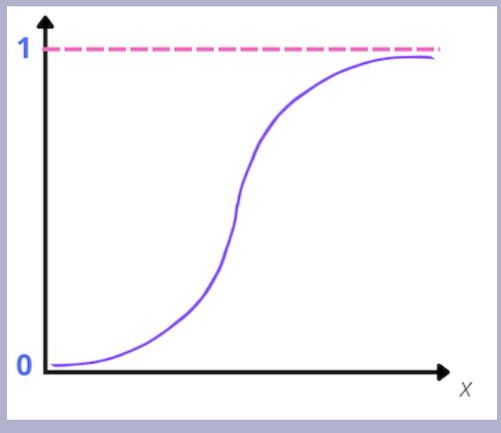
A simple NLP representation of sentences to make text readable by computers. It counts how many times each word in its vocabulary appears in an input sentence

BAG OF WORDS + LOGISTIC REGRESSION MODEL

LogisticRegression(): a simple ML model which separates data points into classes (0 or 1 in our case) by altering a logistic curve

CountVectorizer(): builds a vocabulary for the model by mapping words to numbers

Accuracy, precision, and recall: popular performance metrics for classification tasks



BAG OF WORDS + NEURAL NETWORK MODEL

Neural network: an ML model based on the human brain; large neural networks with many hidden layers are used in deep learning

MLPClassifier(): passes your input data into sklearn's implementation of a neural net, and will return an appropriate set of classified predictions