

Lesson 2 Naive Bayes

Supervised Classification

- learning from labeled data. After understanding the data, the algorithm determines which label should be given to new data by associating patterns to the unlabeled new data.
- Examples
 - Identifying someone from a set of pictures
 - Song recommendation based on previous liked songs

Features and Labels

- Song example
- Features
 - Intensity
 - Temp
 - Genre
 - Voice gender
- Labels
 - Like
 - Dislike

Naive Bayes (**TODO**: write down notes starting at lesson 2 part 24)

C = Cancer

$$p(C) = 0.01$$

Test: 90% it is positive if you have C (Sensitivity)
90% it is negative if you don't have C (Specitivity)

Question: Test = Positive
Probability of having cancer

Bayes Rule