1. Naive bayes

Category Probabilistic classifier.

Applies bayes theorem with strong naive assumption that features are independent.

$P(A|B)$ - probability of A given B true.

$$P(y|x_1, x_2, ...x_n) = \frac{P(y)P(x_1, x_2, ...x_n \mid y)}{P(x_1, x_2, ...x_n)}$$

Using naive assumption of independence: $P(x_1, x_2, ...x_n \mid y) = \Pi P(x_i \mid y)$

?Why this works? https://www.cs.unb.ca/~hzhang/publications/FLAIRS04ZhangH.pdf ?Gaussian Naive Bayes? ?central limit theorem? ?probability vs likelyhood? z-score(or standard score) $= \frac{X-M}{\sigma}$

To deal with continuous features