



Cannabis Data Science

Saturday Morning Statistics #12

February 12th, 2022

Question of the Day

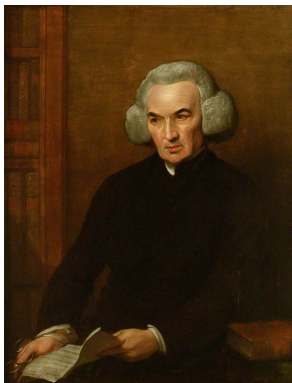
- Can we predict the **distribution of prices** for various cannabis products based on their factors, such as their type and cannabinoid content?

Bayesian Methodology



Thomas Bayes (1701 – 1761)

Outlined for the first known time the solution to inverse probability.



Richard Price (1723 – 1791)

Welsh Philosopher and Mathematician who published Bayes' notes.

Bayes' Theorem

Bayes' Theorem is $P(Y|X) = \frac{P(X|Y) \times P(Y)}{P(X)}$ where:

- $P(X)$ is evidence (data);
- $P(Y)$ is prior probability (beliefs);
- $P(X|Y)$ is the likelihood;
- $P(Y|X)$ is the **posterior probability**.



Thank you for coming.

Lesson of the Day

- We can update our **prior beliefs** as more and more **data** comes to light using the **likelihood** of observing the data.