

Bayesian Methods

1. **Foundation:** Bayesian methods R based on Bayes' theorem, updating probabilities with new evidence.

2. **Classification:** They R useful for classification tasks where prior knowledge is available.

3. **Probabilistic:** These methods provide a probabilistic approach to decision-making under uncertainty.

4. **Estimation:** Supports both parameter estimation & hypothesis testing.

5. **Assumption:** Assumes independence between features in the case of Naïve Bayes.

6. **Scalability:** Can be applied to large datasets effectively using approximate inference.

7. **Priors:** Incorporates prior distributions, making it flexible in modeling.

8. **Inference:** Offers methods like Markov Chain Monte Carlo (MCMC) for inference.

9. **Incremental:** Suitable for incremental learning as new data arrives continuously.

10. **Applications:** Commonly used in spam filtering, txt classification, & medical diagnosis.