Results for Naïve Bayes

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Contents:

1. Naïve Bayes:

1.1 Digit Recognition Dataset

Sample 1 Multinomial :::
Accuracy: 0.922171353826
Training Accuracy 1:
0.922171353826
Scores: [0.9038961 0.91168831 0.92708333 0.88802083 0.91927083 0.92167102
0.91884817 0.91029024 0.90501319 0.91777188]
Average: 0.912355391477
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Sample 2 Gaussian:::
[6 8 3 ..., 8 8 9]
Accuracy: 0.748855461086
Sample 3 Bernoulli:::
[6 7 3 ..., 8 8 9]
Accuracy: 0.864617396991
Testing::::
Sample 1 Multinomial :::
[1 1 3 ..., 8 9 8]
Accuracy: 0.889198218263
Sample 2 Gaussian:::
[1 8 3 ..., 8 8 8]
Accuracy: 0.786191536748
Sample 3 Bernoulli:::
[6 7 3 ..., 8 8 9]
Accuracy: 0.864617396991

1.2 Amazon Dataset

1. MultinomialNB classifier, alpha = 1, fit_prior = True give Accuracy = 54.97%.

   [5 5 5 ..., 5 5 5]

   Accuracy:

   0.549753559693

2. MultinomialNB classifier, alpha = 5, fit_prior = True give Accuracy = 54.75%.

   [5 5 5 ..., 5 5 5]

   Accuracy:

   0.547508214677

3. MultinomialNB classifier, alpha = 5, fit_prior = False give Accuracy = 27.53%.

   [5 5 5 ..., 5 5 4]

   Accuracy:

   0.275355969332