Bayesian Machine Learning
Course 67564
Solution To Exercise 5: Classification
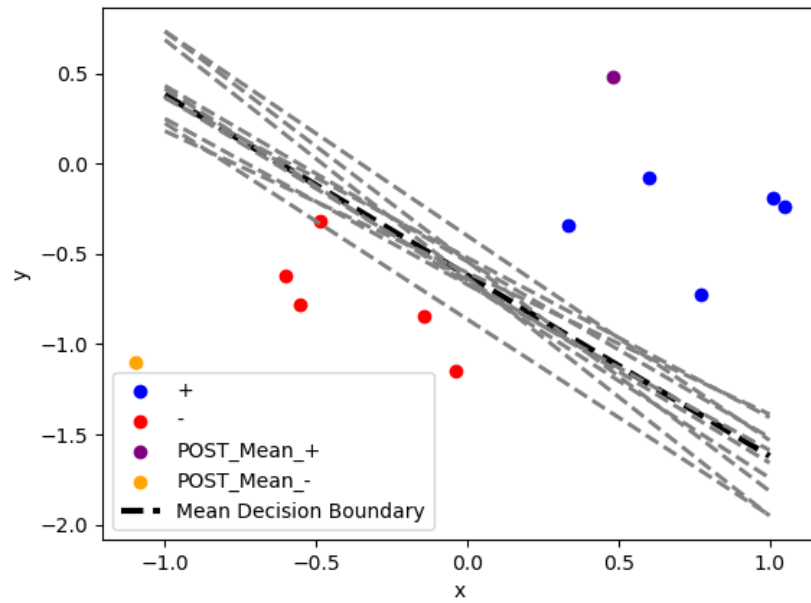
Barak Haim 0

12/01/2023
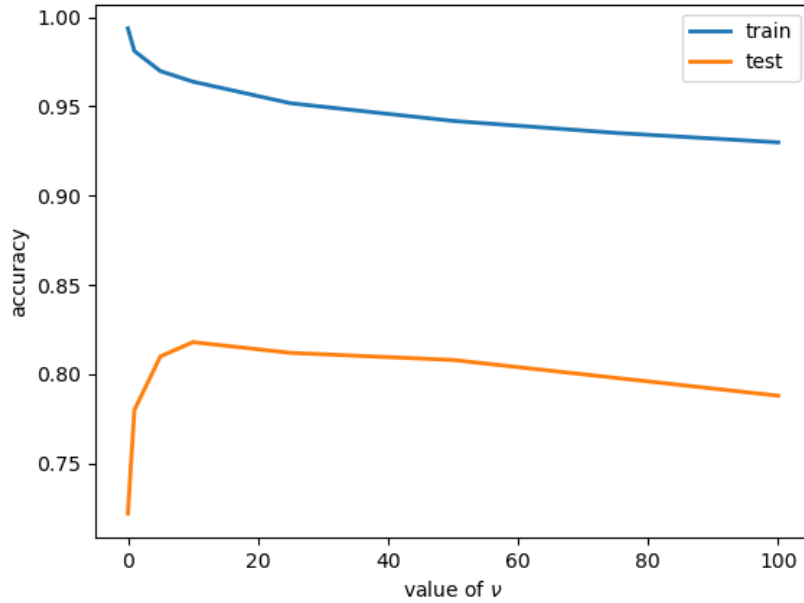
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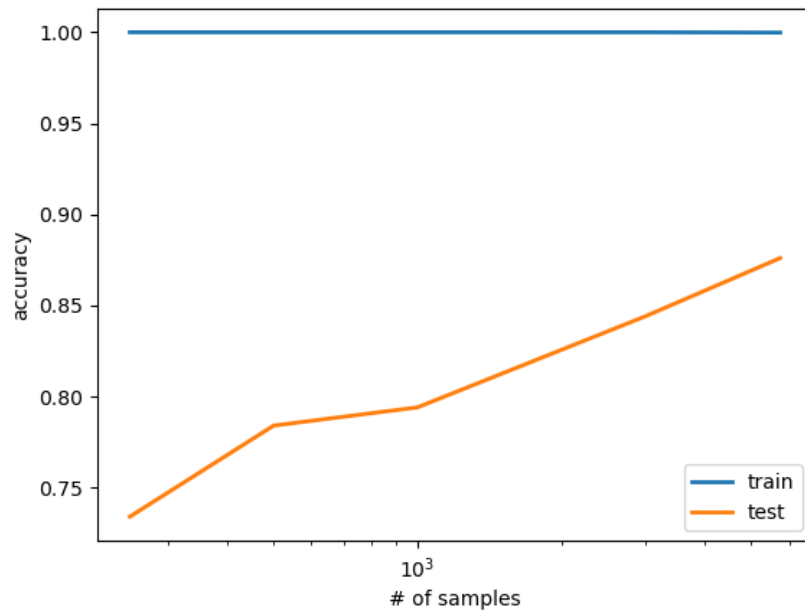
1 Decision Boundaries

2 Image Classification

2.1 Generative Classification of Images

The test accuracy for $\nu = 0$ is 0.72 and for $\nu = 25$ is 0.81. This happens as $\nu = 0$ gives us the ML solution but $\nu = 25$ is a better estimate for the covariance distribution and so the model is able to generalize better.

2.2 Discriminative Classification of Images

As we can see, the most confident are clearly cuter than the least.