Machine Learning (WiSe 2025/2026)

Author: Suvansh Shukla
Matriculation No. 256245

Assignment 2 Task 2.3

For Categorical features: I would suggest using a Naive Bayes classifier. This should work as Naive Bayes uses a supervised learning approach requiring labelled data. Using the 0-1 loss function we could also try to approximate it's accuracy.

For Numerical features: we could use Gaussian distribution model. This would allow us to use certain parameters of the dataset like mean μ or variance σ. Thanks to the ubiquity of such a model, inference and estimation would be simplified as well.