

FYS-STK3155/4155 Applied Data Analysis and Machine Learning - Project 2: Classification and Regression

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<https://github.com/liseanh/FYS-STK4155-project2/>

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Abstract

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1 Introduction

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2 Theory

To evaluate the performance of our classification model, we consider the accuracy score, given by

$$\frac{\sum_{i=1}^n I(t_i = y_i)}{n}, \quad (1)$$

where t_i is the target, y_i is our model output and I is the indicator function,

$$I = \begin{cases} 1 & t_i = y_i \\ 0 & t_i \neq y_i \end{cases}.$$

2.1 Stochastic Gradient Descent (SGD)

2.2 Logistic Regression (LR)

2.3 Neural Networks (NN)

3 Method

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4 Results

5 Discussion

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6 Conclusion

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