

GTx - ISYE6501x Homework 1

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Abstract

Your abstract.

1 Introduction

Write here [help library](#)

2 Homework Questions

2.1 Question 2.1

Describe a situation or problem from your job, everyday life, current events, etc., for which a classification model would be appropriate. List some (up to 5) predictors that you might use.

2.2 Question 2.2

Variable	Coefficient
A_1	-0.0010065348
A_2	-0.0011729048
A_3	- 0.0016261967
A_8	0.0030064203
A_9	1.0049405641
A_{10}	0.0028259432
A_{11}	0.0002600295
A_{12}	0.0005349551
A_{14}	0.0012283758
A_{15}	0.1063633995
Constant	- 0.08158492

Table 1: Variables and Coefficients of Unscaled Data

$$\begin{aligned} & \text{Equation of Classifier Line (Unscaled)} \\ & -0.0010065348A_1 - 0.0011729048A_2 - 0.0016261967A_3 + 0.0030064203A_8 \\ & + 1.0049405641A_9 - 0.0028259432A_{10} + 0.0002600295A_{11} - 0.0005349551A_{12} \\ & - 0.0012283758A_{14} + 0.1063633995A_{15} - 0.08158492 \\ & \text{Accuracy Score: } 0.8639144 \end{aligned}$$

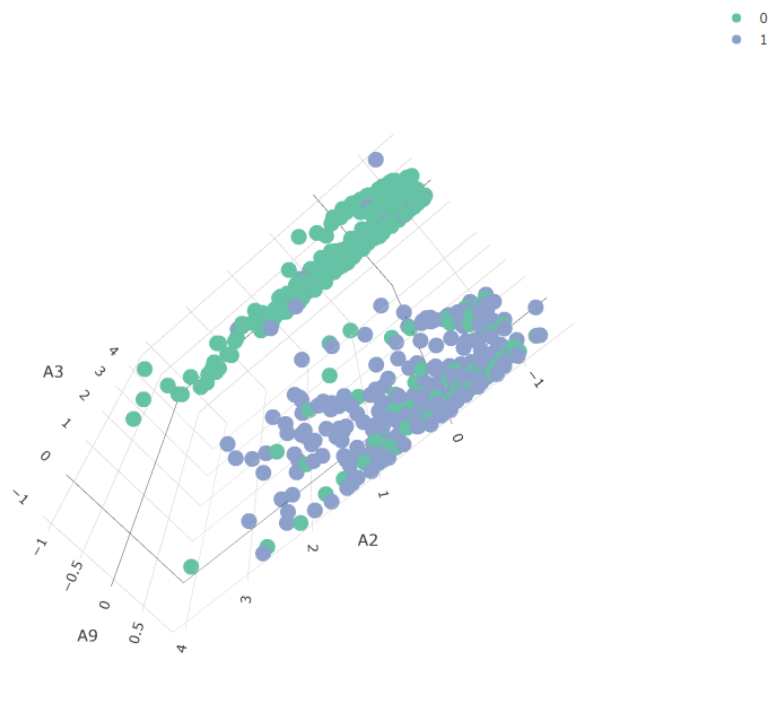


Figure 1: 3D Scatter Plot with Data from A2, A3 and A9 Columns

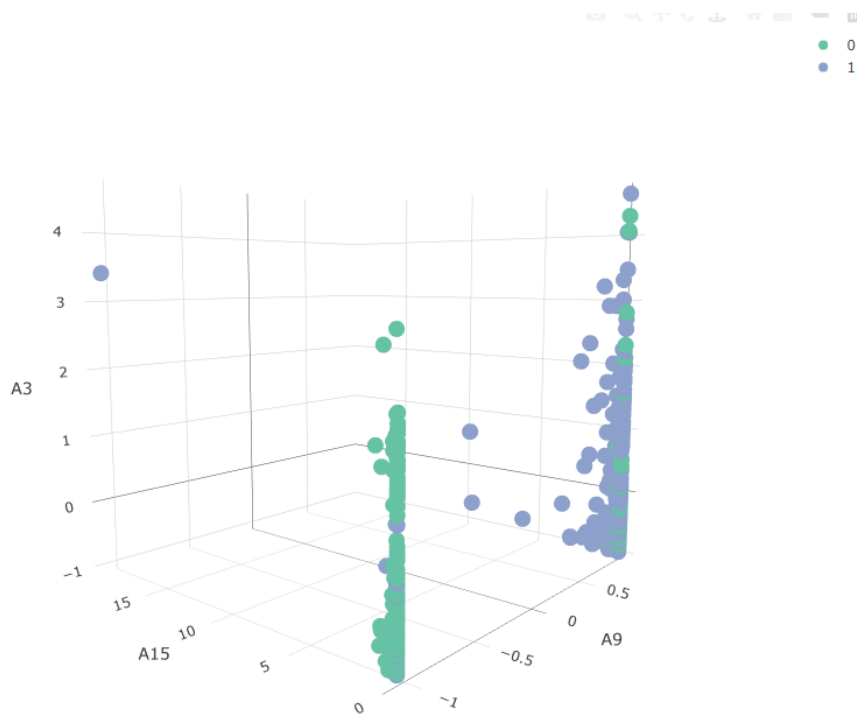


Figure 2: 3D Scatter Plot with Data from A15, A3 and A9 Columns