

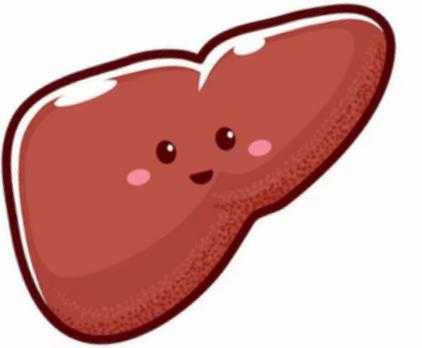
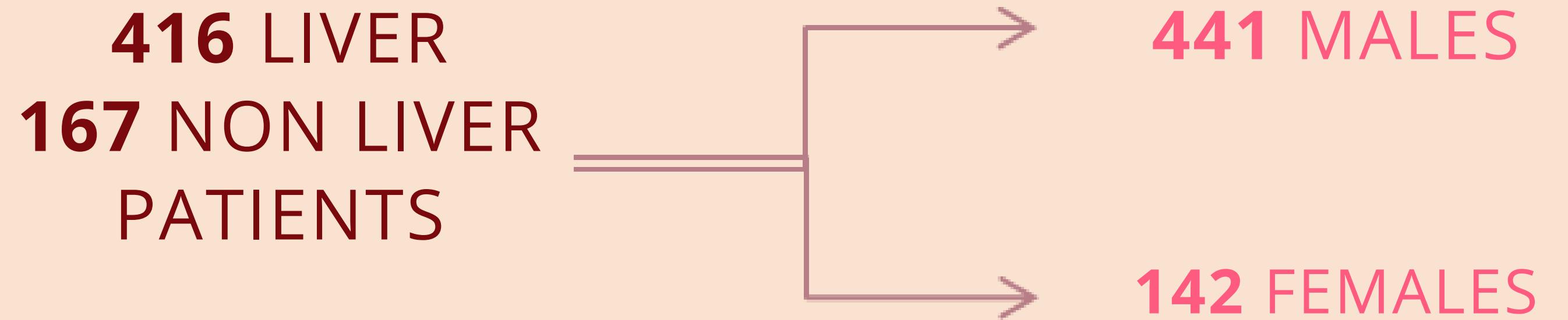


BIOINSIGHTS PROJECT

By Nicolaev Irina and Codreanu
Maria-Cristina



Indian Liver Patient Dataset

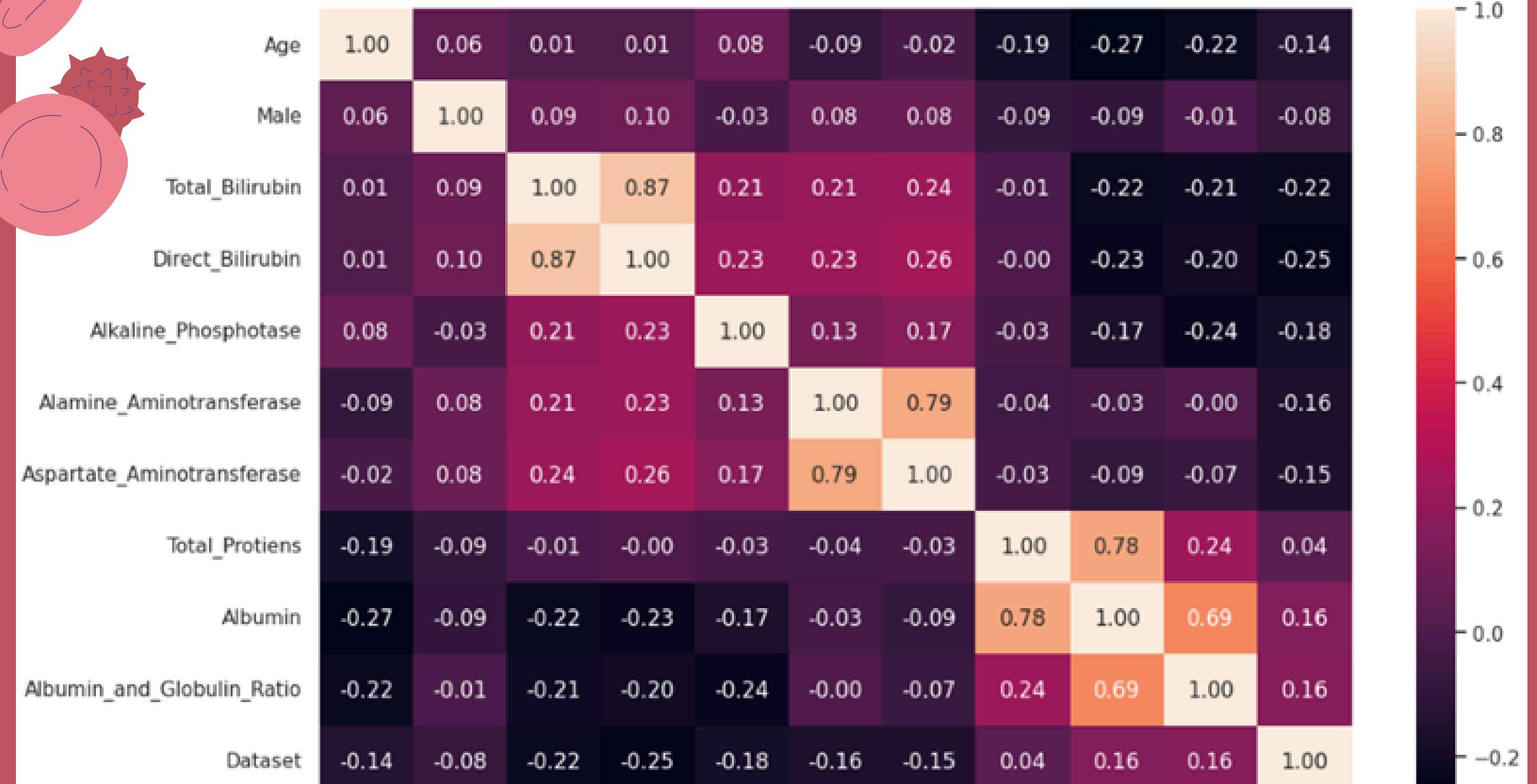


Our goal

to determine which patients have liver disease and which ones do not

Girls
Go IT

AN EXPLICIT HEATMAP

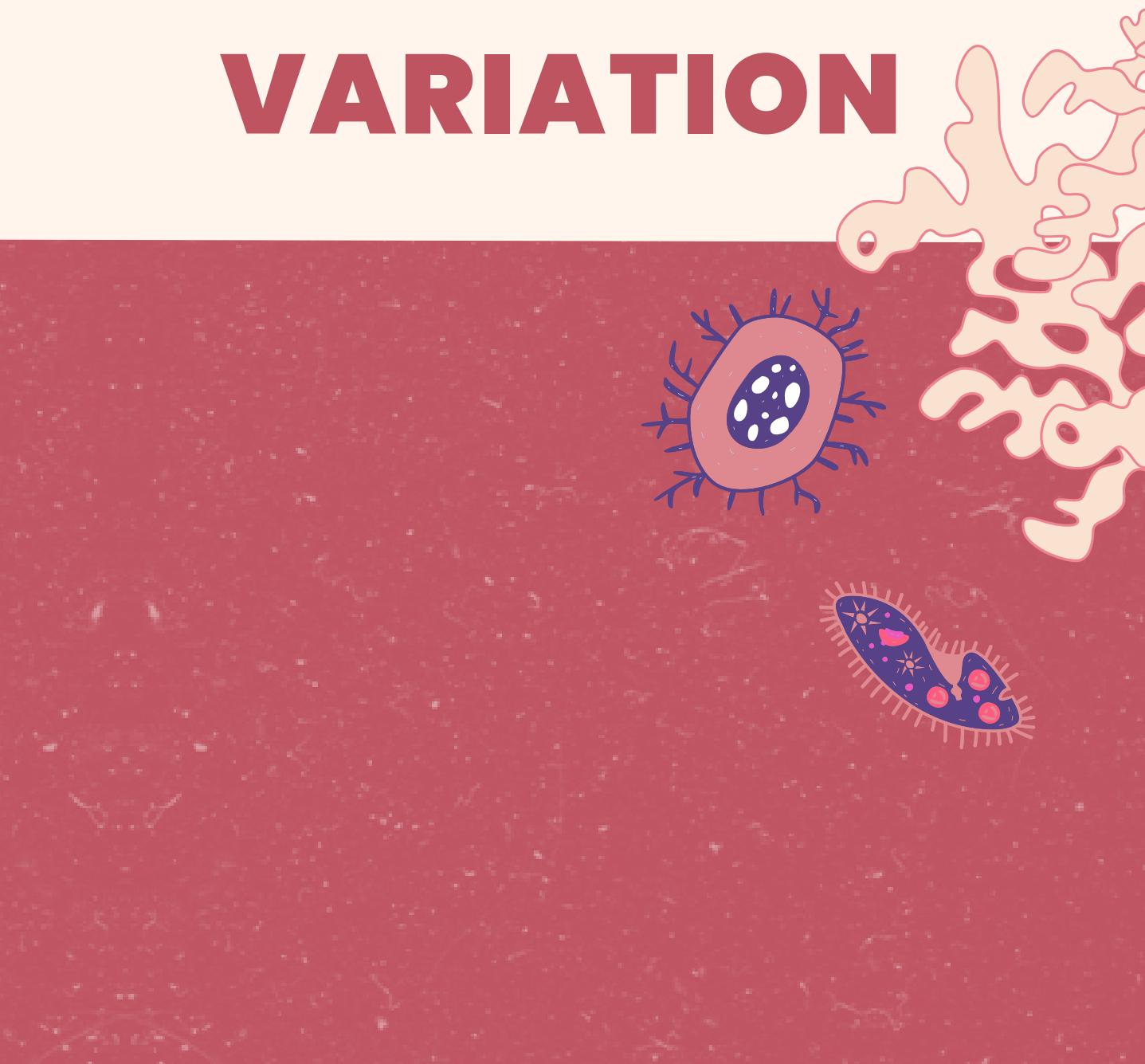


Age
Male
Total_Bilirubin
Direct_Bilirubin
Alkaline_Phosphotase
Alanine_Aminotransferase
Aspartate_Aminotransferase
Total_Protiens
Albumin
Albumin_and_Globulin_Ratio
Dataset

Dataset

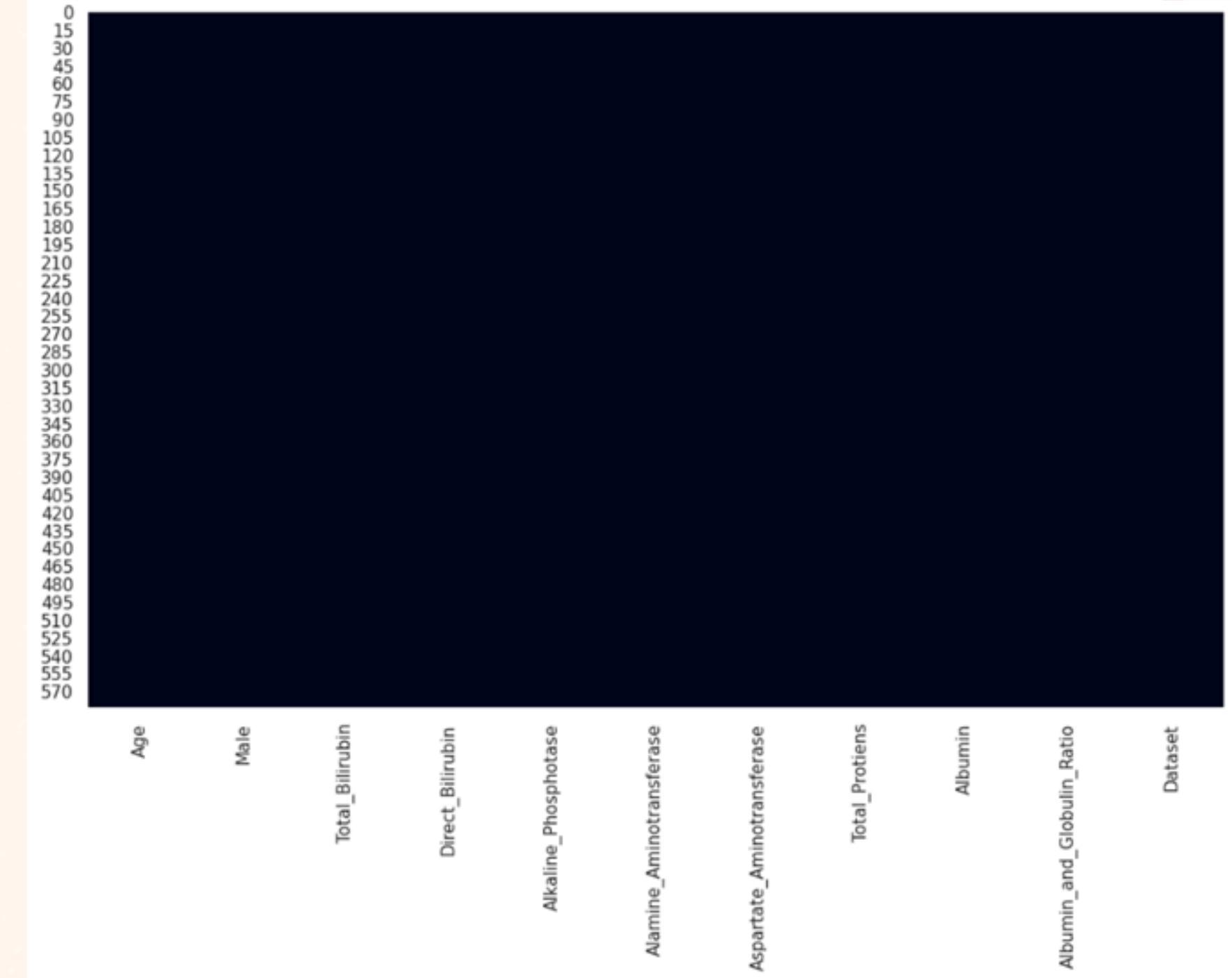
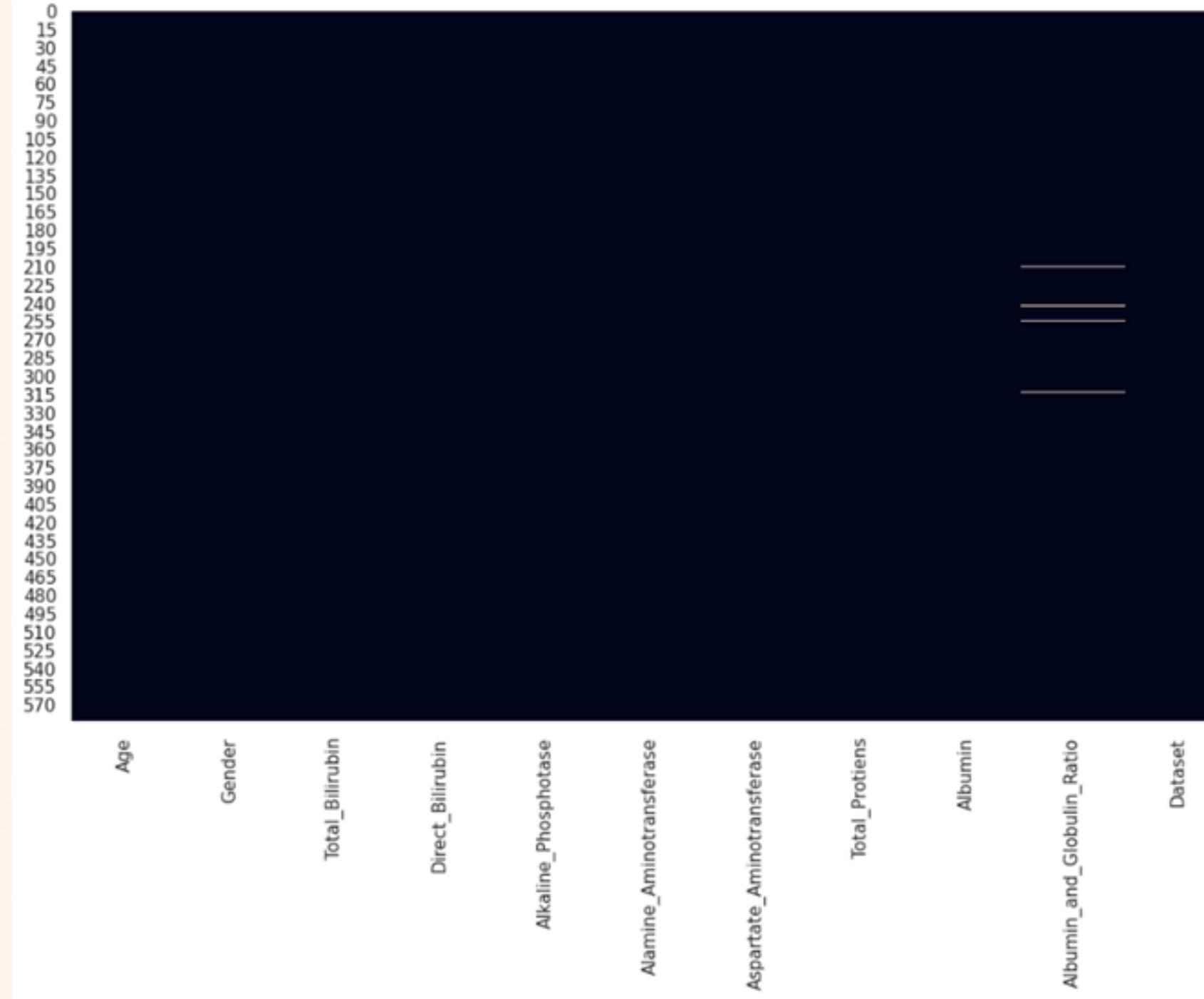


SCATTER MATRIX PLOT SHOWING VARIATION



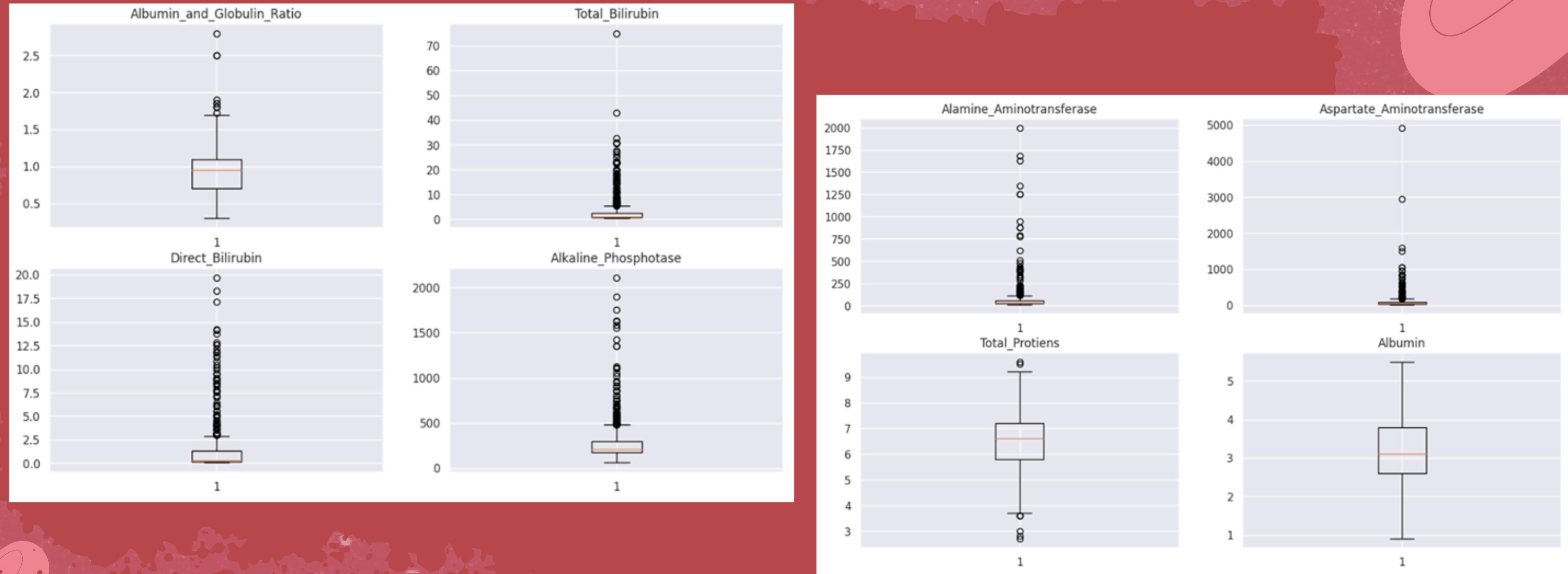


FIRSTLY, WE HANDLED THE MISSING VALUES USING MICE



Girls
Go IT

WORKING WITH OUTLIERS



Random Forest

```
Best Parameters: {'criterion': 'gini', 'n_estimators': 100}
Model Accuracy: 0.7485714285714286
Prediction for new instance: [1.]
```

AdaBoost

```
Best Parameters: {'algorithm': 'SAMME.R', 'learning_rate': 1.0}
Model Accuracy: 0.7028571428571428
Prediction for new instance: [1.]
```

ML MODELS

Logistic Regression

→ Accuracy: 0.76
Classification Report:

K-NEIGHBOURS

→ Accuracy: 0.69



Conclusions

