

# Bias Detection Report

Title: Bias Detection Report

Introduction:

This report presents the results of a bias detection analysis on the "Statlog.csv" dataset. The analysis focused on the "Credit amount" and "Personal status and sex" features.

Methods:

The analysis used the max/min ratio method to detect bias in the "Credit amount" feature and the Shannon entropy method to detect bias in the "Personal status and sex" feature.

Results:

The max/min ratio for the "Credit amount" feature is 445.0, which indicates extreme bias.

The balance metric for the "Personal status and sex" feature is 0.7660518140593616, and the Shannon entropy is 1.5321036281187232.

Conclusion:

The results suggest that there is a significant correlation bias between the "Credit amount" feature and the "Personal status and sex" feature. The bias level for the "Credit amount" feature is Extreme Bias, and the bias level for the "Personal status and sex" feature is Moderate Bias. Therefore, the overall bias level is Extreme Bias.

Recommendations:

Based on the results, it is recommended to take steps to mitigate the bias in the "Credit amount" feature and to consider the potential impact of the bias on the "Personal status and sex" feature.

Appendix:

The appendix includes the detailed results of the analysis, including the max/min ratio and Shannon entropy calculations.