Bias Detection Report

Bias Detection Report for Statlog Dataset

The analysis of the Statlog dataset indicates a low level of bias in the relationship between housing circumstances and credit risk classification.

1. Bias Type: Correlation

2. Relevant Features: 'Housing' and 'Credit risk (Good/Bad)'

3. Bias Levels:

   - Cramér's V: Level 2 (Low bias)

   - Statistical Parity: Level 1 (No bias)

   - Total Variation: Level 2 (Low bias)

4. Overall Bias Level: Level 2 (Low bias)

5. Additional Explanation:

   - The Cramér's V analysis indicates a weak association between 'Housing' and 'Credit risk (Good/Bad)', suggesting that housing circumstances have a minor influence on credit risk classification.

   - The Statistical Parity analysis shows no significant bias, indicating that the distribution of credit risk is fairly independent of housing categories.

   - The Total Variation analysis reveals a slight difference in distribution, suggesting that while there is some variation, it is not substantial.

Conclusion: The analysis suggests that there is a low level of bias in the relationship between housing circumstances and credit risk classification in the dataset. This indicates that housing circumstances do not significantly influence credit risk outcomes.