# **Bias Detection Report**

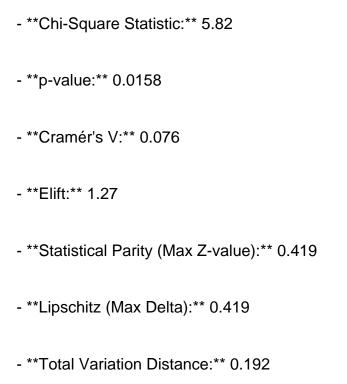
### **Correlation Bias Analysis Report**

**Dataset Analyzed: Statlog.csv** 

- Total Variation Distance

Features Examined:
- Foreign Worker Status
- Credit Risk (Good/Bad)
Bias Type: Correlation
Tools Used:
- Chi-Square Test
- Cramér's V
- Elift
- Statistical Parity
- Lipschitz Function

## Values Obtained:



#### **Bias Severity:**

- \*\*Chi-Square Test:\*\* Indicates a significant association
- \*\*Cramér's V and Elift:\*\* No significant bias
- \*\*Statistical Parity and Lipschitz:\*\* Moderate bias
- \*\*Total Variation Distance:\*\* Minimal bias

### **Natural Language Interpretation**

The analysis indicates that while there is a statistically significant association between Foreign Worker status and Credit Risk, the strength of this association is weak, as indicated by Cramér's V and Elift values. However, moderate bias levels suggested by Statistical Parity and Lipschitz methods suggest potential disparities in distribution that should be considered in credit risk assessments.

#### Recommendations

Given the findings, particularly the moderate bias detected in Statistical Parity and Lipschitz results, caution should be exercised when using Foreign Worker status as a factor in credit risk evaluations. Consider further analysis or adjustments to mitigate identified biases.