Bias Detection Report

Bias Detection Report for Housing Circumstances

Bias Type: Distribution

Relevant Feature(s): Housing

Bias Level:

- **Distribution Bias:** Moderate Bias (Level 3)

- **Correlation Bias with Credit Amount:** No Bias (Level 1)

Findings and Analysis:

- The distribution of the 'Housing' feature shows a moderate bias, with the 'own' category being more prevalent than 'rent' and 'for free'.

- The Jensen-Shannon Divergence (JSD) value was 0.0772, indicating a relatively balanced distribution.

- Z-Scores for housing categories suggested the 'own' category is above the mean frequency.

- Wasserstein-2 distances indicated significant differences between 'rent' and 'for free', highlighting potential distributional concerns.

- HSIC analysis revealed no significant correlation bias between 'Housing' and 'Credit amount'.

Visualizations:

Below is the pie chart depicting the distribution of housing categories.

Bar Chart of Housing

for free

10.8%

rent

17.9%

71.3%

own