

Bias Detection Report

Bias Detection Report: Household Roles Distribution

Dataset Analyzed: Adult.csv

Feature Examined: Relationship (Household Roles)

Bias Type: Distribution

Tools Used:

- Shannon Entropy & Balance Metric
- Max/Min Ratio Analysis
- Gini Index

Results:

1. ****Shannon Entropy & Balance Metric:****

- Shannon Entropy: 2.1544
- Balance Metric: 0.8334

2. ****Max/Min Ratio Analysis:****

- Max/Min Ratio: 13.4485

3. ****Gini Index:****

- Corrected Gini Index: 0.7321

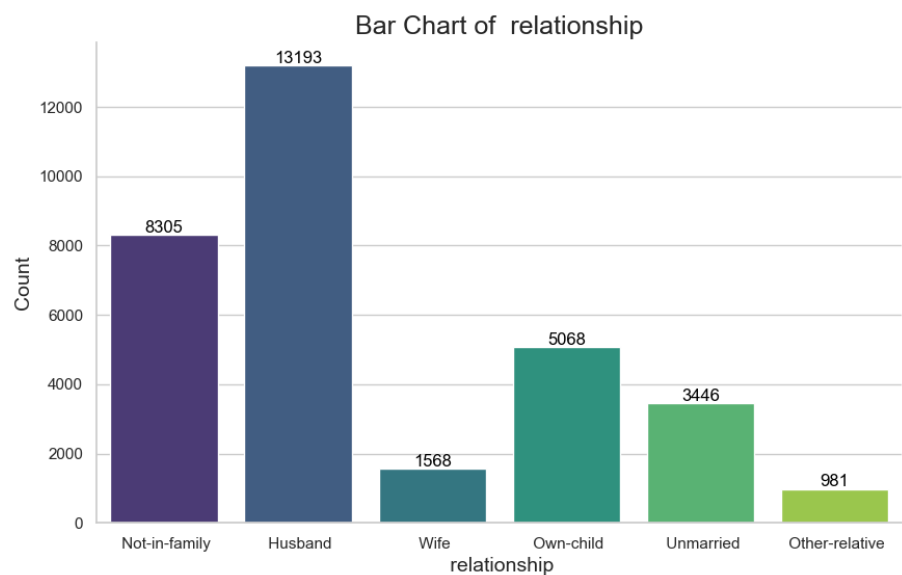
- Adjusted Gini Index: 0.8786

Interpretation:

- The distribution of household roles shows moderate bias with some roles being more prevalent.

Visualization:

- A bar chart representing the distribution of household roles is included below.



Recommendations

- The dataset exhibits moderate bias in household roles distribution. Use caution when applying it to analyses that may be sensitive to this bias.
- Consider potential implications of this bias on your analysis or outcomes.

This concludes the bias detection report for the household roles distribution in the Adult dataset.