

Bias Detection Report

This report analyzes the distribution of the 'MaritalStatus' feature in the COMPAS dataset to identify any overrepresentation of a particular group.

The Shannon balance metric is approximately 0.464, indicating a significant imbalance in the distribution.

The max-min ratio is approximately 211.86, highlighting a substantial disparity between the most and least frequent categories.

The entropy is 1.303, with a normalized entropy of approximately 0.464, confirming the imbalance.

The corrected Gini index is approximately 0.426, and the adjusted Gini index is approximately 0.498, indicating moderate inequality.

The analysis reveals a significant overrepresentation of certain marital status categories, which could lead to biased outcomes in any analysis or model using this dataset.