

Bias Detection Report

Bias Detection Report for 'Adult_cleaned.csv'

The analysis focused on detecting potential biases related to the 'age' feature. The investigation included both correlation and distribution bias analyses.

Correlation Analysis: The correlation analysis between age and other numerical features ('fnlwgt', 'education-num', 'capital-gain', 'capital-loss', 'hours-per-week') revealed very weak correlations, all falling into Level 1 bias, indicating no significant correlation bias.

Distribution Analysis: The distribution analysis of age showed a slight positive skew with a skewness value of 0.559, categorized as Level 2 bias, suggesting a moderate distribution bias. However, the kurtosis value of -0.166 indicated a platykurtic distribution, falling into Level 1 bias, suggesting no significant bias in terms of the distribution's peakedness.

Overall Bias Level: The age feature exhibits a Level 2 bias, primarily due to the slight skewness in its distribution.