

Bias Detection Report

Bias Detection Report for Patient Languages in MIMIC-IV Dataset

1. Bias Type: Distribution

2. Relevant Feature: patient_lang

3. Bias Level: The analyses indicate a significant bias in the distribution of patient languages.

4. Detailed Explanation:

- Entropy Analysis: The normalized entropy value of 0.486 suggests significant bias, indicating that certain languages are more dominant.

- Gini Index Analysis: The Adjusted Gini Index of 0.3793 reflects moderate inequality, supporting the presence of bias.

- Max-Min Ratio Analysis: The high Max-Min Ratio of 8.48 confirms significant disparity between the most and least common languages.

5. Conclusion: The distribution of patient languages shows significant bias, which could impact analyses assuming fair language representation.