

Bias Detection Report

The overall workflow to detect and analyze bias in the dataset is as follows:

1. Load the dataset and define the features to be analyzed.
2. Use the Chi-square test to detect correlation bias between two categorical features.
3. Use the t-test and Cohen's d calculation to detect correlation bias between a categorical feature and a numerical feature.
4. Evaluate the bias based on the results from the tools used.
5. Generate a detection report based on the results.

The detection report includes the following information:

1. Bias Type: Correlation
2. Relevant Feature(s): patient_race, hospital_expire_flag, patient_age
3. Bias Level:
4. Additional Explanation: The results from the Chi-square test and the t-test and Cohen's d calculation suggest a significant correlation bias between the features. The bias level is categorized into one of the five tiers based on the evaluation metric recommendations from the various tools used.
5. Charts and Visualizations: