Bias Detection Report

The distribution of Ethnic_Code_Text in the COMPAS dataset shows a moderate level of bias. The Balance metric is 0.55, which indicates a moderate level of bias. The Shannon entropy is 1.74, which also suggests a moderate level of uncertainty or randomness in the distribution. The max/min ratio of categories is 692.77, which indicates a high level of imbalance in the distribution. The entropy and normalized entropy are 1.74 and 0.55, respectively, which also suggest a moderate level of uncertainty or randomness in the distribution. The Gini Index and adjusted Gini Index are 0.65 and 0.73, respectively, which indicate a moderate to high level of bias. The relative risks of each category are: African-American: 3.99, Caucasian: 3.22, Hispanic: 1.29, Other: 0.38, Asian: 0.04, Native American: 0.03, Arabic: 0.01, African-Am: 0.007, Oriental: 0.005. The normalized bias score is 692.77, which indicates a high level of bias.