

# Bias Detection Report

## Gender Distribution Bias Analysis Report

Dataset: MIMIC-IV.csv

Relevant Feature: Gender

Bias Type: Distribution

### Analysis Results:

Shannon Entropy and Balance Metric: Balance - 0.9993, Shannon Entropy - 0.9993

Max/Min Ratio: 1.063

Gini Index: Adjusted Gini Index - 0.9981

Relative Risk: Normalized Bias Score - 1.063, Relative Risks - F: 1.0305, M: 0.9695

Bias Level: Level 1 (No Bias)

The analysis shows that the gender distribution in this dataset is very balanced, with no significant bias detected. The metrics are very close to the ideal state, indicating a uniform distribution.