

# Bias Detection Report

## Bias Detection Report

### Dataset Analyzed

- File Path: source\_files/Adult.csv
- Feature: Age

### Bias Type Detected

- **Distribution Bias**

### Tools and Methods Used

- **Max-Min Ratio Calculation**
- **Shannon Entropy Calculation**

### Values Obtained and Bias Extent

- **Max-Min Ratio**: 91.99 (Significant Bias)
- **Shannon Entropy**: 1.95 (Compared to Max Entropy: 2.30)

# Visualizations

- Bar chart representing the age distribution.

## Natural Language Interpretation

The age distribution in this dataset shows significant bias, with certain age groups being more dominant than others. The analysis revealed a substantial deviation from a uniform distribution, as evidenced by the max-min ratio and Shannon entropy values.

## Recommendations

Consider addressing the age distribution bias if using this dataset for applications necessitating balanced age representation.

