



Figure: Visualization of the Census Income dataset.

- (A) This histogram effectively captures the age distribution of respondents by grouping ages into bins, which allows for an easy comparison of frequency across different age ranges. The gridlines and clear axis labels further enhance the plot's ability to provide a detailed overview of how age is spread among the respondents.
- (B) The pie chart is a suitable choice for visualizing the distribution of relationship statuses, as it clearly shows the proportion of respondents in each category. By displaying the data as percentages, it provides an immediate understanding of the relative sizes of each group within the total sample.
- (C) The grouped bar chart clearly shows the actual number of respondents earning $\leq 50K$ and $> 50K$ across different education levels, using distinct colors for each income group. This approach highlights the scale of income distribution within each education level.