SURVEY DATA ANALYSIS REPORT

Survey Data

August 09, 2025

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Executive Summary

- This report provides an in-depth statistical analysis of 22 numeric variables from the dataset. The analysis includes calculation of mean, standard error, and confidence intervals, helping uncover trends, anomalies, and patterns in the data. A total of 7 charts and visualizations were generated, covering data distributions, correlations, and critical comparisons between key variables. These visual tools aid in understanding relationships and outliers. Before conducting the analysis, standard data cleaning procedures were applied — null values were removed, data types were standardized, and column names were normalized. This ensures the integrity and consistency of results derived from the dataset.

Data Cleaning Notes

Standard cleaning applied: removed null values, fixed data types, and normalized column names.

Statistical Summary

Variable	Mean	SE	MoE (95% CI)
baseline value	132.73	0.35	0.7
accelerations	0.0	0.0	0.0
fetal_movement	0.0	0.0	0.0
uterine_contractions	0.0	0.0	0.0
light_decelerations	0.0	0.0	0.0
severe_decelerations	0.0	0.0	0.0
prolongued_decelerations	0.0	0.0	0.0
abnormal_short_term_variability	43.7	0.54	1.07
mean_value_of_short_term_variability	1.08	0.02	0.03
percentage_of_time_with_abnormal_long_term_variability	5.49	0.34	0.67
mean_value_of_long_term_variability	8.68	0.15	0.29
histogram_width	53.8	0.95	1.87
histogram_min	105.77	0.82	1.6
histogram_max	159.57	0.51	1.0
histogram_number_of_peaks	2.92	0.08	0.15
histogram_number_of_zeroes	0.0	0.0	0.0
histogram_mode	138.73	0.44	0.86
histogram_mean	137.62	0.42	0.82
histogram_median	139.52	0.42	0.83
histogram_variance	6.31	0.21	0.42
histogram_tendency	0.25	0.02	0.04
fetal_health	1.0	0.0	0.0

Charts & Visualizations

Distribution: baseline value
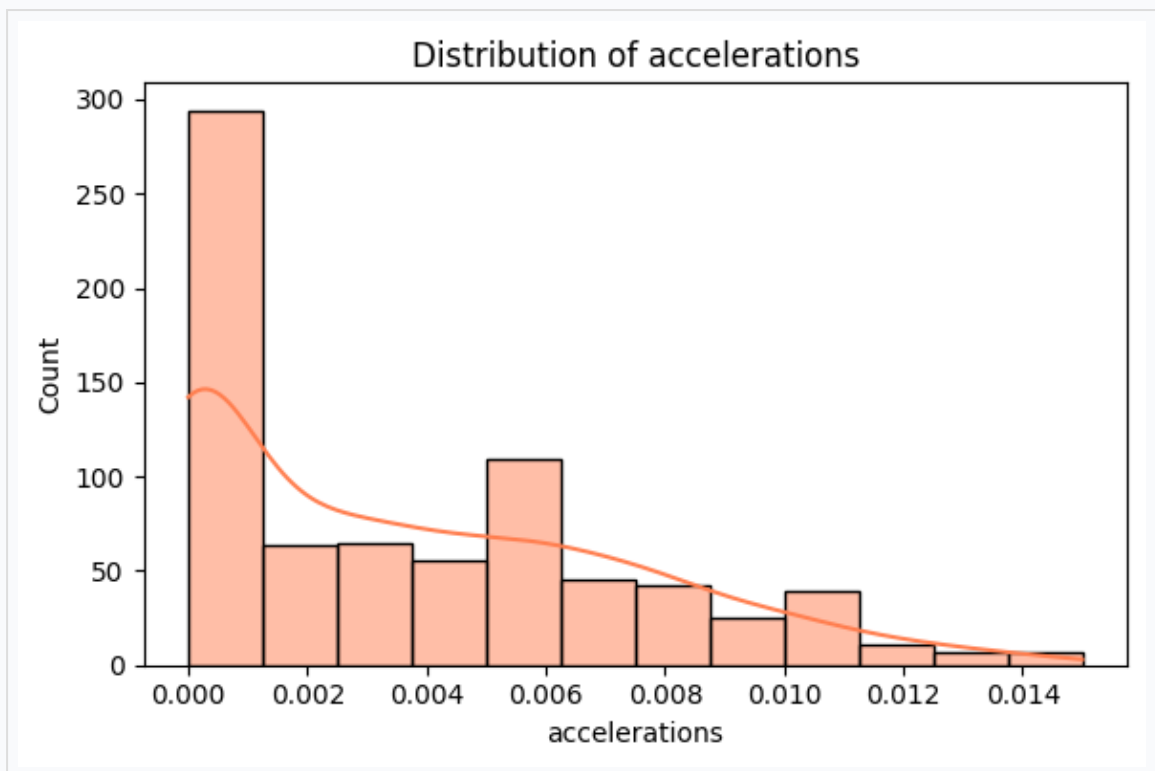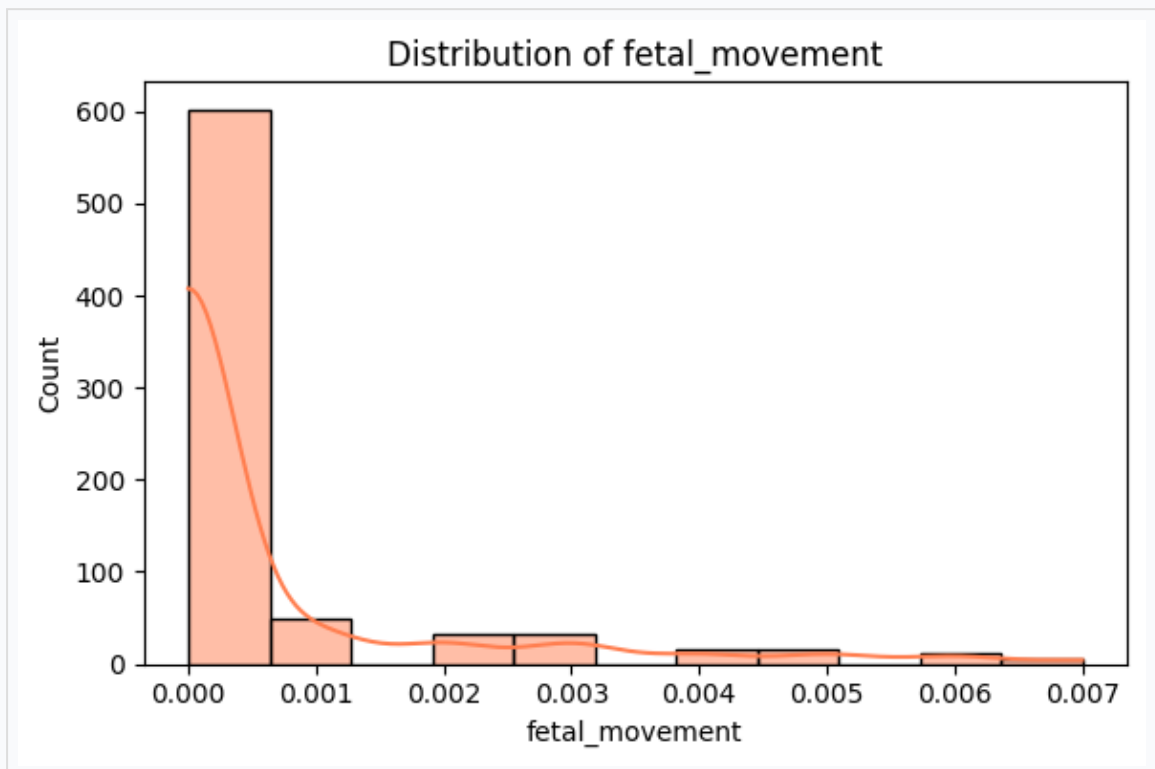

Distribution of baseline value
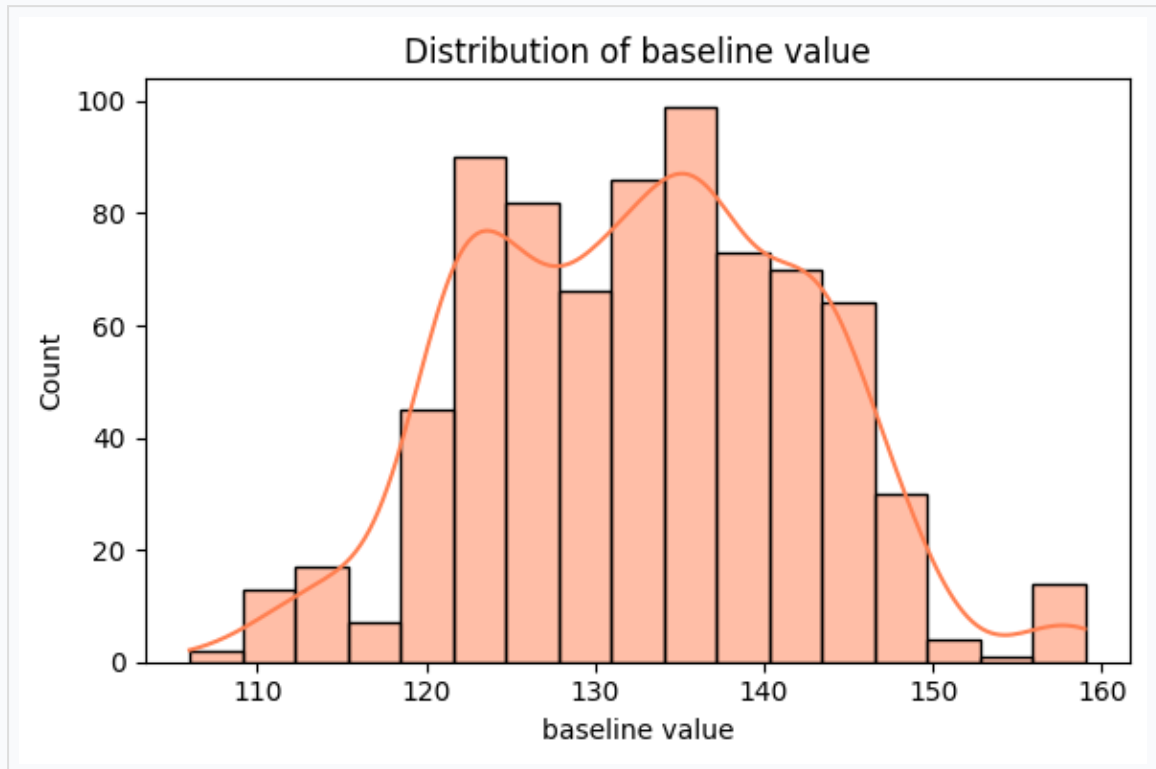
The average baseline value is 132.73 with a spread of 9.80.

Distribution: accelerations

The average accelerations is 0.00 with a spread of 0.00.
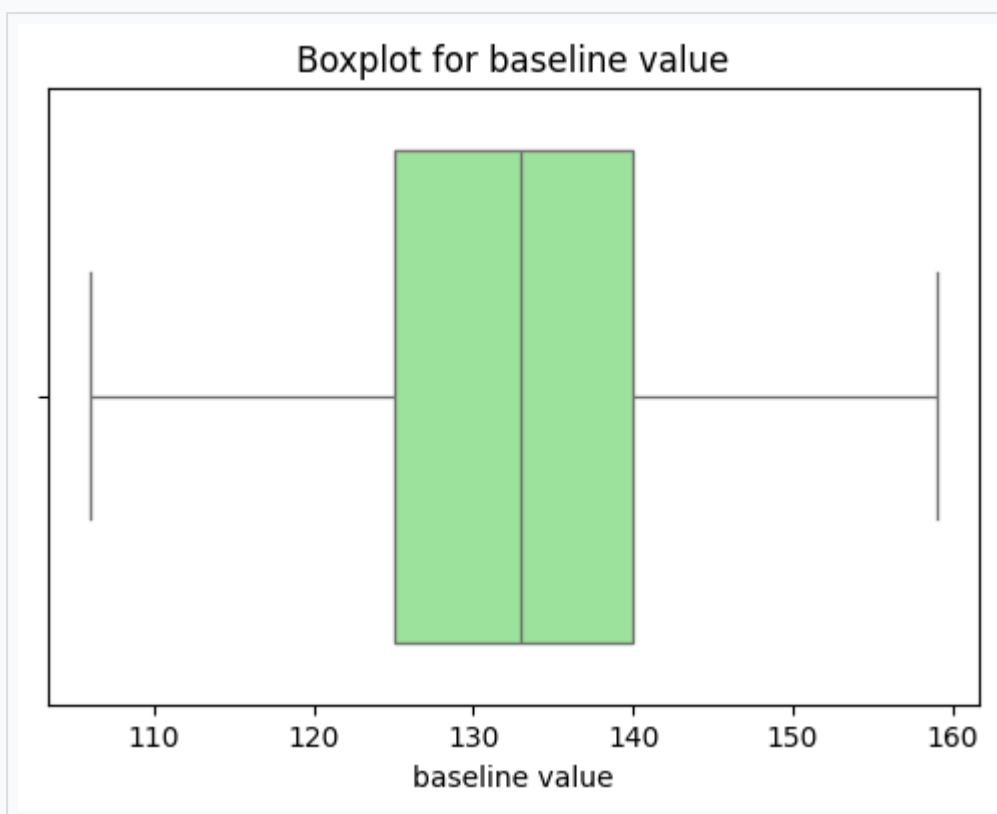
Distribution: fetal_movement

The average fetal_movement is 0.00 with a spread of 0.00.
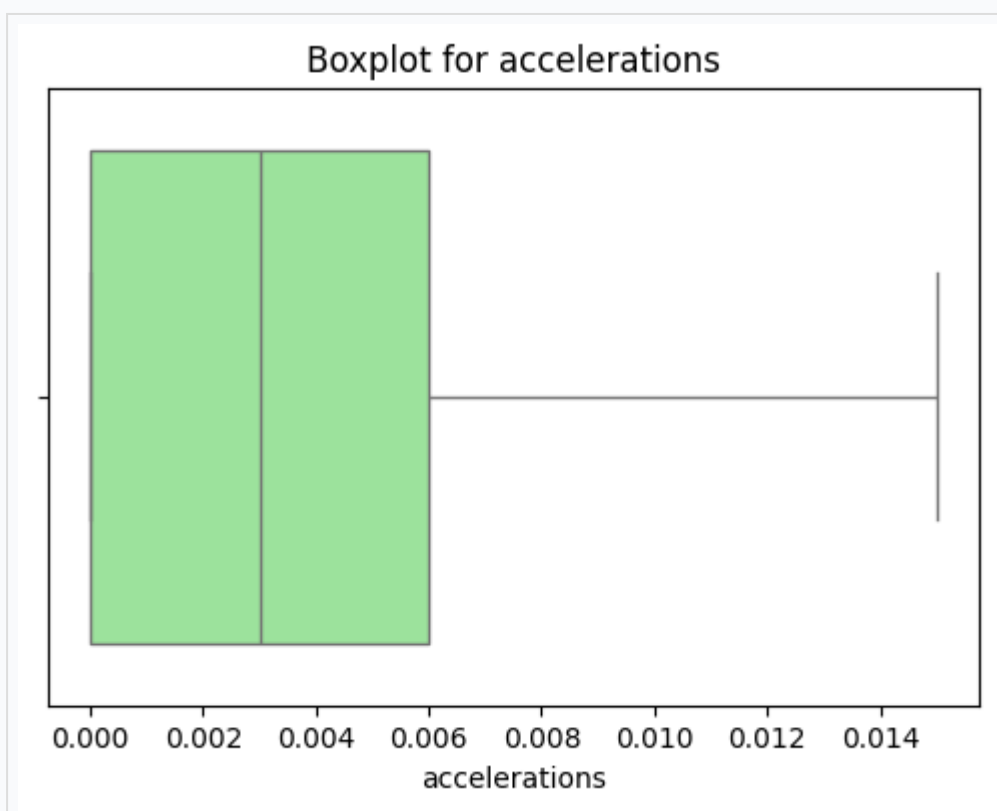
Correlation Heatmap

Correlation Heatmap

Boxplot: baseline value

Boxplot for baseline value

The average baseline value is 132.73 with a spread of 9.80.

Boxplot: accelerations

Boxplot for accelerations

The average accelerations is 0.00 with a spread of 0.00.

Scatter Plot: baseline value vs accelerations
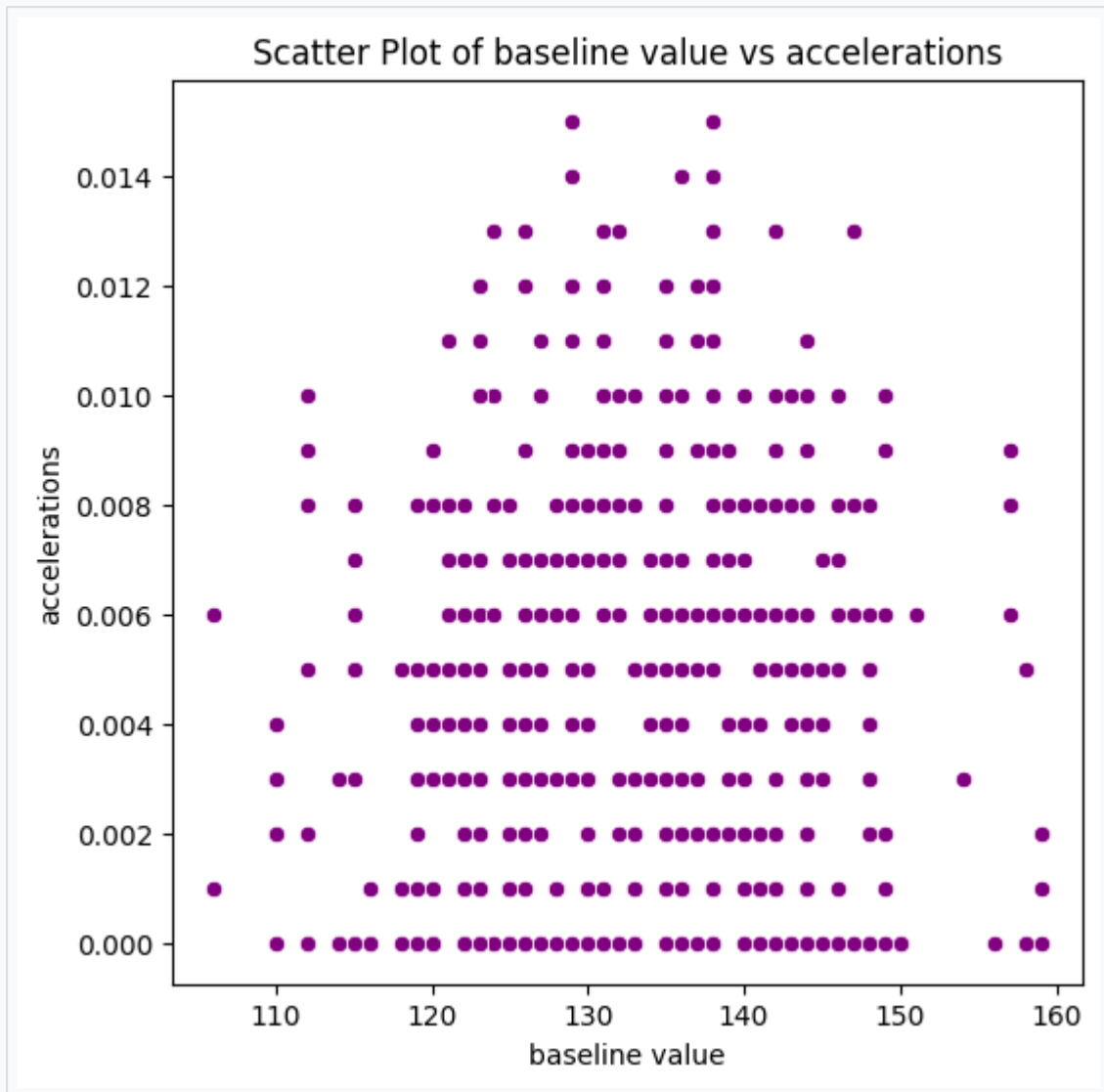
Recommendations

- Based on the statistical summaries and visual inspections, the dataset appears well-balanced. Most variables show consistent distributions with low variability, indicating good data quality. No immediate anomalies or issues were detected that would hinder further modeling or decision-making.