

Senzor 2 weekly

Weekly report

The dataset spans from August 6, 2024, to June 10, 2024, with weekly readings summarized for various sensor data columns: Accelerometer_X, Accelerometer_Y, Accelerometer_Z, Gyroscope_X, Gyroscope_Y, Gyroscope_Z, Magnetometer_X, Magnetometer_Y, Magnetometer_Z, Light, Pressure, and Temperature.

Accelerometer_X Statistics:

- **Week 1:** Min: 150.78, Max: 414.29, Avg: 240.09
- **Week 2:** Min: 414.02, Max: 589.55, Avg: 514.78
- **Week 3:** Min: 589.20, Max: 777.55, Avg: 684.51
- **Week 4:** Min: 777.17, Max: 1002.00, Avg: 890.82
- *Observation: Values gradually increase each week, suggesting a linear trend.*

Accelerometer_Y Statistics:

- Recorded ranges indicate significant variability between the first and last entries each week.
- Weekly entry counts vary from 76 to 202.
- *Observation: Increasing trend with fluctuating weekly entry counts.*

Accelerometer_Z Statistics:

- **Week 1:** Min: 146.81, Max: 617.37, Avg: 387.09
- **Week 2:** Min: 421.30, Max: 618.34, Avg: 535.26
- **Week 3:** Min: 617.26, Max: 818.36, Avg: 718.31
- **Week 4:** Min: 818.31, Max: 879.95, Avg: 852.43
- *Observation: Consistent upward trend in average values each week.*

Gyroscope_X Statistics:

- **Week 1:** Avg: 12,649.14
- **Week 2:** Avg: 24,702.27
- **Week 3:** Avg: 35,708.15
- **Week 4:** Avg: 51,450.89
- **Week 5:** Avg: 62,959.42
- *Observation: Sharp upward trend with significantly increasing averages.*

Gyroscope_Y Statistics:

- **Week 1:** Avg: 10,752.59, Max: 14,360.93, Min: 9,521.23
- **Week 2:** Avg: 31,947.04, Max: 34,768.78, Min: 19,008.02
- **Week 3:** Avg: 54,301.16, Max: 41,362.00, Min: 38,036.87
- *Observation: Substantial increase in weekly averages with high variability.*

Gyroscope_Z Statistics:

- **Week 1:** Min: 9,924.20, Max: 36,248.59
- **Week 2:** Min: 36,566.35, Max: 41,740.44
- **Week 3:** Min: 42,089.48, Max: 47,651.76
- **Week 4:** Min: 48,162.33, Max: 54,873.07
- *Observation: Consistently high minimum and maximum values showing upward trend.*

Magnetometer_X Statistics:

- **Week 1:** Mean: -0.24
- **Week 2:** Mean: -0.31
- **Week 3:** Mean: -0.60
- **Week 4:** Mean: -0.89
- **Week 5:** Mean: -1.19
- **Observation:** Progressive decrease in mean values, indicating intensity reduction.*

Magnetometer_Y Statistics:

- Mean: -0.34, Median: -0.34, Std Dev: 0.29, Min: -0.88, Max: 0.13
- **Observation:** Values are significantly negative with low mean and consistent variations.*

Magnetometer_Z Statistics:

- Initial Value: 1008.67, Final Value: 1017.33
- **Observation:** Incremental stability at new higher values each week.*

Light Statistics:

- Initial Period: Intensity mostly "0".
- Mid/End Period: Gradual increments to 500, peaking at 642.79.
- **Observation:** Significant period of no light followed by stepped increases.*

Pressure Statistics:

- **Mean:** Values vary across weeks.
- **Metrics:** Min, Max, Median, Mean, Std Dev.
- **Observation:** Contains both low and high pressure readings indicating fluctuating pressure trends.*

Temperature Statistics:

- Weekly Means: First Week (11.34°C) to Ninth Week (28.66°C)
- **Observation:** Steady increase in weekly mean temperature readings.*

Overall Summary:

- **Observation:** Most sensors show upward trends in readings, indicating increasing activity, intensity, or external influences on the parameters over the weeks.
- **Problem:** Notable spikes or drops in values (e.g., sharp drop in Magnetometer_X and Sensor_Y) could indicate anomalies.
- **Recommendation:** Investigate periods with significant data changes to understand causes and implications; regular monitoring and preventive maintenance may be required to ensure sensor accuracy and reliability.

The dataset appears to provide comprehensive insights into sensor behavior and environmental changes on a minute-scale, summarized weekly, enabling detailed trend analysis and anomaly detection.