

One page data storytelling with Histogram – **NNAEMEKA NEWMAN OKEREAFOR**

The graph shows a histogram of Fastag fees for fraudulent transactions in India, ranging from INR 50 to INR 350. Key statistics include a minimum fee of INR 60, a mode of INR 120, a median of INR 145, a mean of INR 194, and a maximum fee of INR 350. The peak at the mode of INR 120 suggests a high frequency of fraudulent transactions at this level. The median's proximity to the mode, coupled with a higher mean, indicates a right-skewed distribution. Two notable peaks occur around INR 120 and INR 320, highlighting common ranges for fraudulent fees. The data spans from INR 60 to INR 350, with higher occurrences of fraudulent transactions in the INR 100-150 range and around INR 320.

However, a significant difference is noted when compared to non-fraudulent transactions which has an average amount of INR 187. With a p-value of 0.04 at 95% confidence, the difference in amounts between flagged and non-flagged transactions is statistically significant. Yet, the difference is only INR 7. This raises questions: Does this small difference justify the label of fraud? Could the fraudulent alerts be false positives or due to system errors? Additionally, what is the real-world purchasing power of INR 7 in India?

