

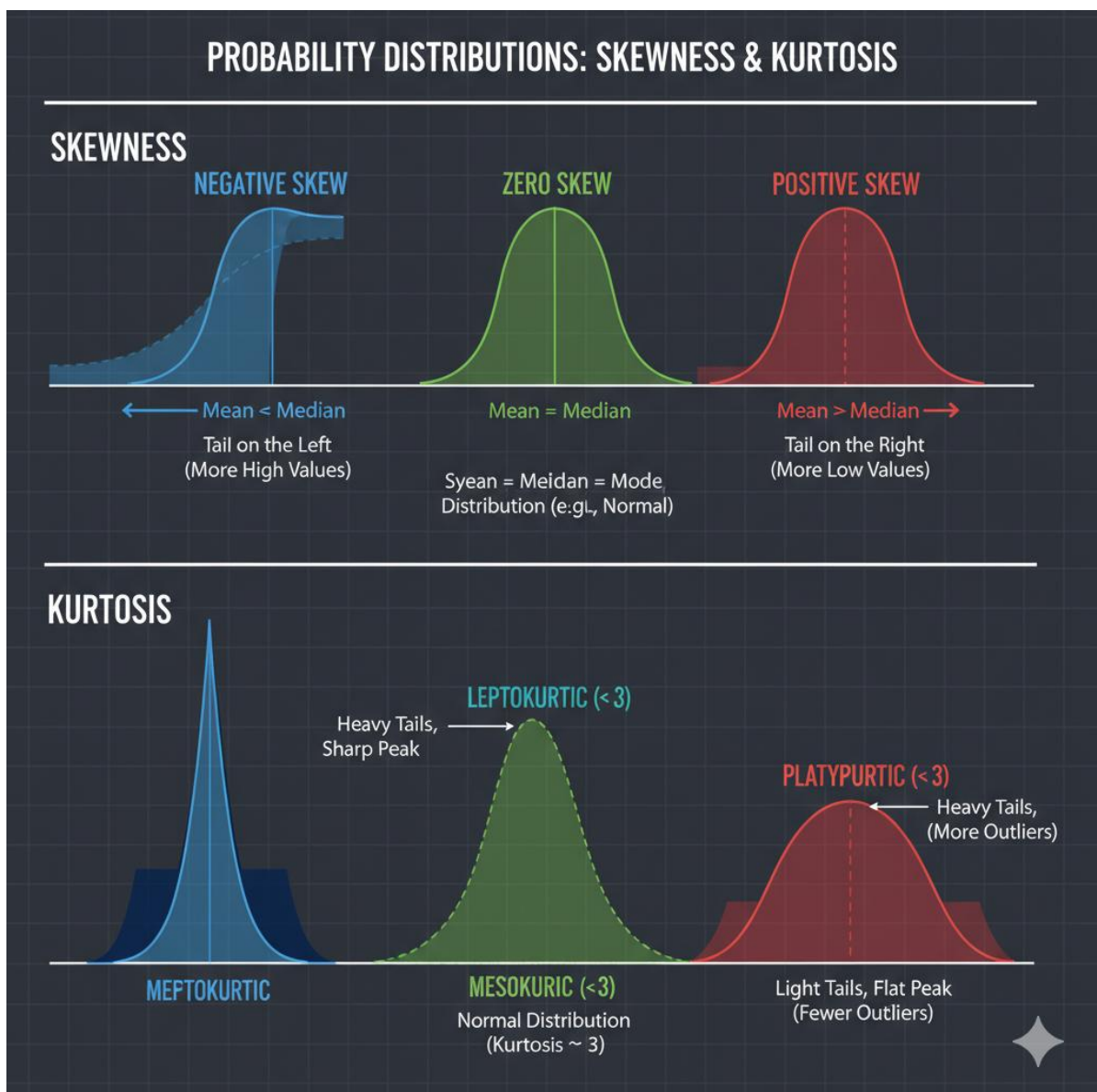
KURTOSIS AND SKEWNESS USING THE STATISTICAL SUMMARY

Skewness

- ✚ Measures asymmetry of the distribution.
- ✚ **Positive skew:** Tail on the right (more low values).
- ✚ **Negative skew:** Tail on the left (more high values).
- ✚ **Zero skew:** Symmetrical distribution.

Kurtosis

- ✚ Measures **tailedness** or **peakedness** of the distribution.
- ✚ **Leptokurtic (>3):** Heavy tails, sharp peak \rightarrow more outliers.
- ✚ **Mesokurtic (~ 3):** Normal distribution.
- ✚ **Platykurtic (<3):** Light tails, flat peak \rightarrow fewer outliers



Kurtosis describes how **peaked** or **flat** a distribution is:

- 🚩 **Leptokurtic (>3)**: Sharp peak, heavy tails → more outliers.
- 🚩 **Mesokurtic (~3)**: Normal distribution.
- 🚩 **Platykurtic (<3)**: Flat peak, light tails → fewer outliers.

Variable	Kurtosis	Interpretation
ssc_p	-0.106021	Platykurtic
hsc_p	-0.055896	Platykurtic
degree_p	-0.218083	Platykurtic
etest_p	-0.438118	Platykurtic
mba_p	-0.372526	Platykurtic
salary	3.217045	Leptokurtic (sharp peak)

Skewness tells us **which side the tail of the distribution stretches toward**:

- 🚩 **Positive Skew (Right-skewed)**: Tail on the right → **mean > median > mode**
- 🚩 **Negative Skew (Left-skewed)**: Tail on the left → **mode > median > mean**
- 🚩 **Zero or Near-Zero Skew**: Symmetrical → **mean ≈ median ≈ mode**

Variable	Skewness	Mean	Median	Mode	Interpretation
ssc_p	-0.132649	67.30	67.0	60.0	Negatively skewed (mode < median)
hsc_p	-0.149533	66.33	65.0	60.0	Negatively skewed
degree_p	0.003407	66.36	66.0	60.0	Nearly symmetrical
etest_p	0.013384	72.10	71.0	60.0	Nearly symmetrical
mba_p	0.137276	62.78	62.0	71.0	Negatively skewed (mode > mean)
salary	3.082187	277648.6	265000.0	300000.0	Strongly right-skewed (mean > median < mode)