Quartiles, Deciles and Percentiles

Data Science and A.I. Lecture Series

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Numerical Example to Compute Quartile Deviation

Given the data set 2, 4, 6, 8, 10, 12, 14, 16, 18 and 20, calculate the first quartile, second quartile, and third quartile using the quartile formulas.

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Third quartile is denoted by Q_3 and to compute, its formula is $Q_3 = \frac{3(n+1)}{4}$.

Then $Q_3 = (\frac{3*(10+1)}{4})^{th}$ observation=8.25 = 16+0.25*(18-16)=16.50.