

What is High Dimensional Data? (Definition & Examples)

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High dimensional data refers to data sets that contain a large number of variables or features, making it difficult to visualize and analyze. This type of data is commonly found in fields such as genetics, finance, and marketing, where there are numerous factors that can influence the outcome. Examples of high dimensional data include DNA sequences, financial market data, and customer behavior data. Due to the complexity and size of high dimensional data, specialized techniques and algorithms are often required to extract meaningful insights and patterns.

What is High Dimensional Data? (Definition & Examples)

High dimensional data refers to a dataset in which the number of features p is larger than the number of N , often written as $p \gg N$.

For example, a dataset that has $p = 6$ features and only $N = 3$ observations would be considered high dimensional data because the number of features is larger than the number of observations.