**Image based Features**

* Mean: The average pixel intensity value within the image. It gives a sense of the overall brightness of the image.
* Sigma (Standard Deviation): A measure of the spread or dispersion of pixel intensity values from the mean. Higher sigma indicates greater variation in pixel intensities.
* Skewness: A measure of the asymmetry of the distribution of pixel intensities. Positive skewness indicates a longer tail on the right side of the distribution, while negative skewness indicates a longer tail on the left side.
* Kurtosis: A measure of the peakedness or flatness of the distribution of pixel intensities. High kurtosis indicates a sharp peak and heavy tails, while low kurtosis indicates a flatter distribution.
* Contrast: Measures the local variations in pixel intensities. Higher contrast indicates larger differences between adjacent pixel values.
* Energy: Represents the uniformity or smoothness of the image texture. High energy values indicate more texture variation.
* Correlation: Measures the linear relationship between pixel intensities at different locations in the image.
* Homogeneity: Reflects the closeness of pixel intensity values in the image. High homogeneity indicates that neighboring pixel intensities are similar.
* Dissimilarity: Measures the average absolute difference in pixel intensity values between neighboring pixels.
* ASM (Angular Second Moment): A measure of image homogeneity.
* Max Probability: The maximum probability of occurrence of a certain texture pattern in the image.
* LBP (Local Binary Pattern) features: Descriptors that capture the local texture patterns by comparing each pixel with its neighboring pixels and encoding the result as a binary number.
* LTP (Local Ternary Pattern) features: Descriptors that but capture local ternary patterns.
* HOG (Histogram of Oriented Gradients) features: Descriptors that capture the distribution of gradient orientations in different parts of the image.