Existing Algorithm:

1. Read input signature image dataset and create a list that will contain the features of each signature image.

**Pre-processing:**

1. For each signature image in the dataset:
2. Convert image into grayscale image.
3. Resize the image to 200x200 pixels.
4. Convert the image into binary image by thresholding using the Otsu’s method.

**Feature Extraction:**

1. Compute the hu moments of the signature image to extract the shape description of the signature image.
2. Compute the Histogram of Gradient to obtain the structure and appearance of the signature image.
3. Compute the aspect ratio, bounding area, contour area, and convex hull area of the signature image.
4. Concatenate all the extracted features add it to the list of signature features.
5. End Loop

**Training Phase:**

1. Scale the values of each feature attribute to the range of [0,1] for all signature images in the list of signature features.
2. Split the dataset to 80% for training set and 20% for the test set.
3. Initialize the SVM classifier and select the linear SVM for its kernel.
4. Fit the dataset to the model and make prediction on the test set.
5. Evaluate the model’s performance.