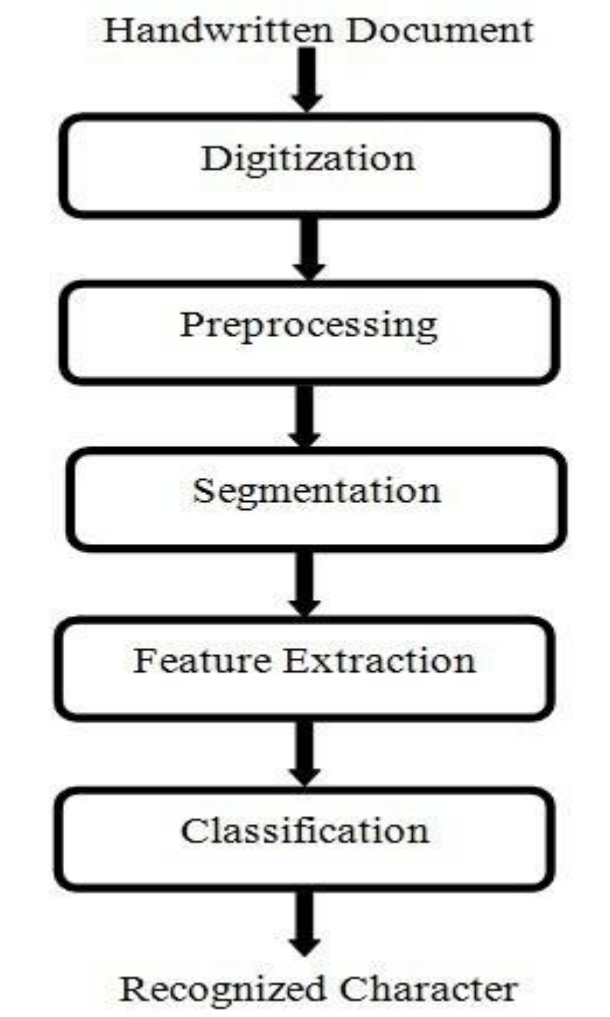# A NOVEL METHOD FOR HANDWRITIND DIGIT RECOGNITION SYSTEM
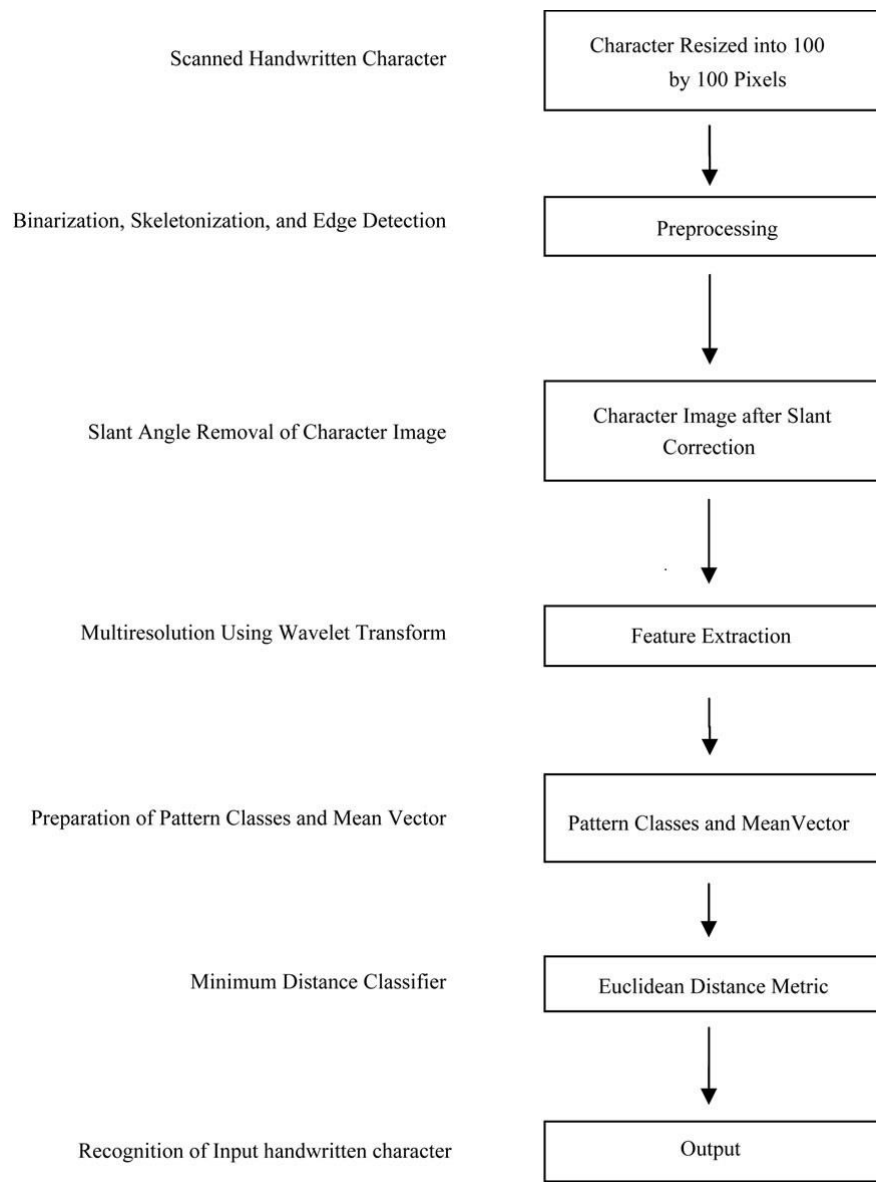
DATAFLOW DIAGRAMS

INTRODUCTION

This document contains the basic graphs/data flow paths in which the data will flow during the developing, training and testing of the model. An image having the sample input/output is also attached along with the document for clear understanding about the objective of the model.
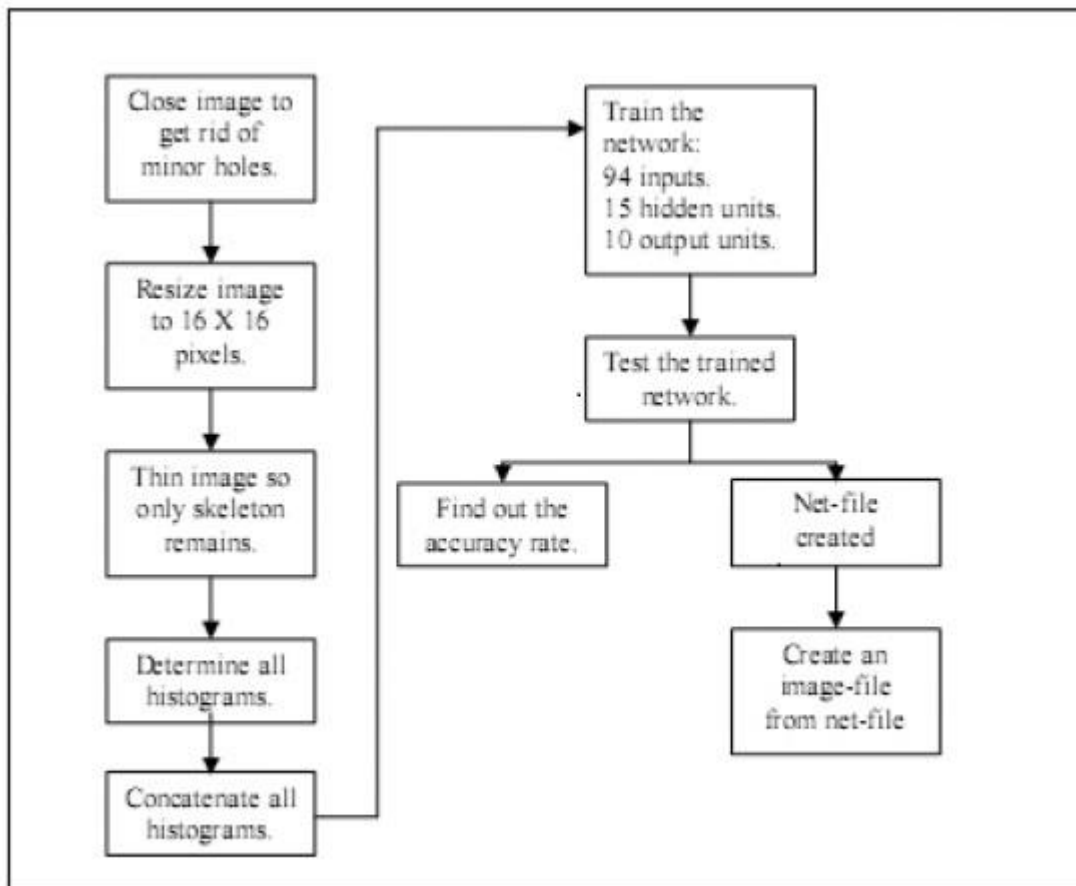
BASIC FLOW GRAPH

Handwritten Document

Digitization

Preprocessing

Segmentation

Feature Extraction

Classification

Recognized Character

GRAPH DEVELOPED FROM THE BASIC GRAPH

Scanned Handwritten Character	**Character Resized into 100 by 100 Pixels**
Binarization, Skeletonization, and Edge Detection	**Preprocessing**
Slant Angle Removal of Character Image	**Character Image after Slant Correction**
Multiresolution Using Wavelet Transform	**Feature Extraction**
Preparation of Pattern Classes and Mean Vector	**Pattern Classes and MeanVector**
Minimum Distance Classifier	**Euclidean Distance Metric**
Recognition of Input handwritten character	**Output**

DATA FLOW GRAPH IN THE TRAINING MODEL

SAMPLE INPUT GIVEN AND OUTPUT FROM THE MODEL