

# A NOVEL METHOD FOR HANDWRITTEN DIGIT RECOGNITION SYSTEM

## WHAT DO THEY THINK AND FEEL?

FEATURE EXTRACTION  
CLASSIFICATION OF DIGIT  
PIXEL DETECTION  
PREDICT IMAGE  
GRABBING CHARACTER TO GRID

## WHAT DO THEY HEAR?

RECOGNIZER  
LEARNING MODULES  
TESTING DATA

## WHAT DO THEY SEE?

STROKE IDENTIFICATION  
RE-SAMPLING  
ACQUISITION

## WHAT DO THEY SAY AND DO?

PREPROCESS THE DATA  
CREATE THE MODEL  
TRAIN THE MODEL  
CREATE GUI TO PREDICT THE DIGIT



### PAINS

REQUIRES LARGE AMOUNT OF TRAINING DATA  
NOT GOOD FOR SYSTEM, LARGE VARIATION EXISTS IN HANDWRITING

### GAINS

CLASSIFICATION TIME IS FAST  
POWERFUL HIGH LEVEL FEATURES