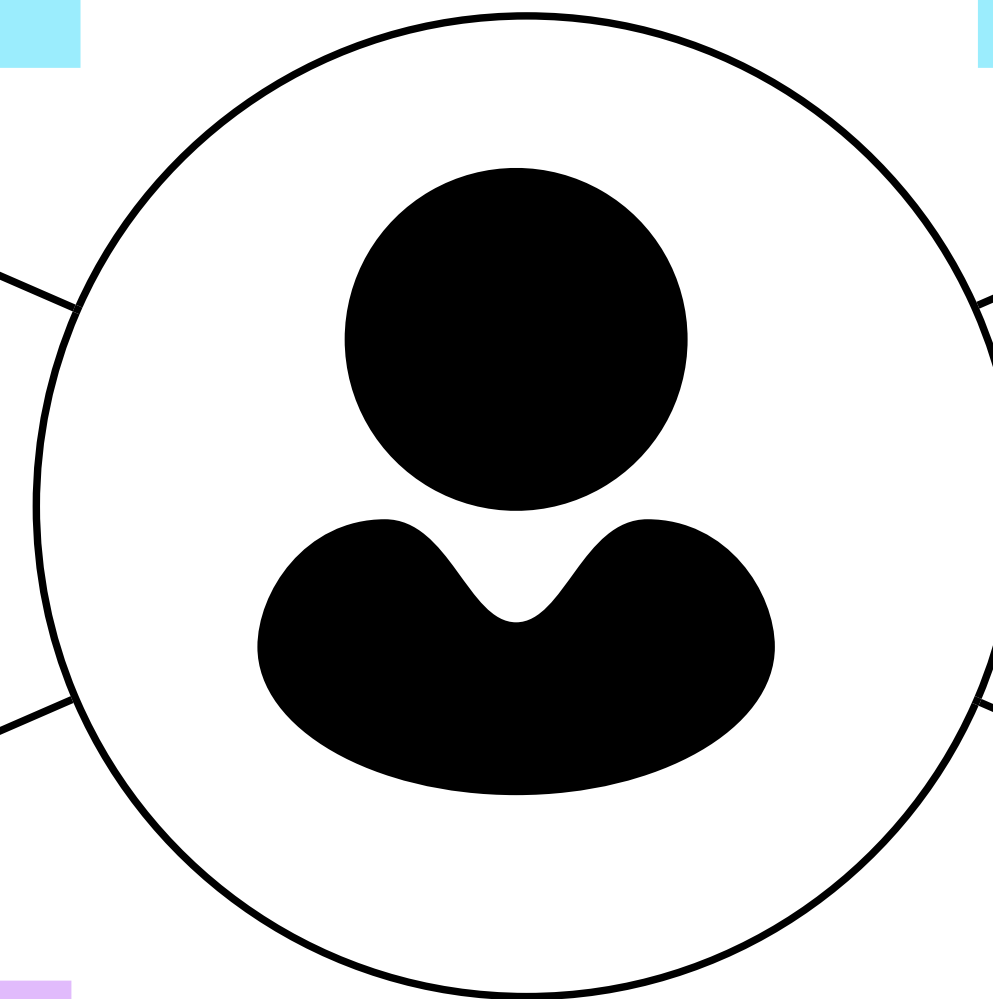


## What do they THINK AND FEEL?

what really counts  
major preoccupations  
worries & aspirations



## What do they SAY AND DO?

attitude in public  
appearance  
behavior towards others

Extract most  
essential  
information  
from raw  
data

Potential  
future  
enhancement  
can be done  
in this field

Analyzed using  
support vector  
machine,  
random forest,  
multilayered  
perceptron

## What do they SEE?

environment  
friends  
what the market offers

Ability to  
detect feature  
object without  
any human  
supervision

Demand high  
recognition  
accuracy and  
lesser  
computational  
complexity

Used in  
automated  
bank cheque  
processing  
system

No need to use  
external  
dependencies or  
devices , this  
process can done  
through our mobile  
phones.

Deficient works  
accomplished  
on Arabic  
pattern digits

Arabic digits  
are more  
challenging  
than English  
patterns

used to reduce the  
manual work to  
understand the  
different styles of  
handwritten digits

They feel  
insecure while  
making their  
bank  
transactions

They have a fear  
about to feed  
their personal  
information in  
the system

They get  
clarity about  
handwritten  
digits

Ability to develop  
an efficient  
algorithm that can  
recognize hand  
written digit

Its creates  
the curiosity  
between the  
people

It will help the  
readers to easily  
understand the  
handwritten  
digits

It converts  
handwritten  
digits into  
machine  
readable  
formats

Helps to  
increase  
the data  
entry

## What do they HEAR?

what friends say  
what boss say  
what influencers say

Helps the  
users to  
enter the  
data  
captcha

## PAIN

fears  
frustrations  
obstacles

Every single user  
writes a digit in  
their own way  
which is difficult  
to understand by  
others

The  
Handwritten  
digits are not  
Flawless

Various object  
needs to be  
trained in dataset  
to recognize  
different  
handwritten digit

Not aware to  
clear  
understand  
about their  
handwritten  
styles

## GAIN

"wants" / needs  
measures of success  
obstacles

It helps in  
bank check  
processing

They are  
effective in  
accuracies

High  
capability of  
hierarchical  
feature  
learning

It makes  
Error free  
and  
operations  
easier