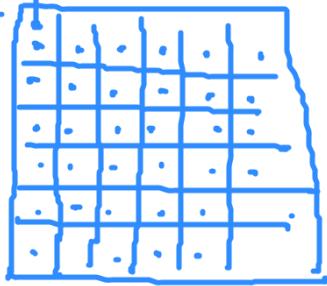


CNN:-

Images

Matrix
(image)



fps

Pixel

Int

Value

(0 - 255)

↑
black

↑
white

types of images

Grey. (black & white)

Color → RGB

LR, Log Reg, SVM

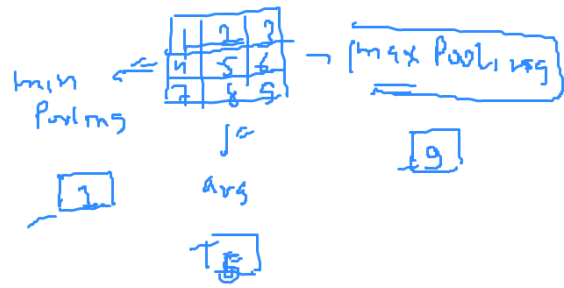
↑
SVM

Data:- train → testing

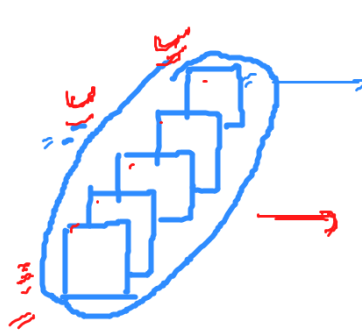
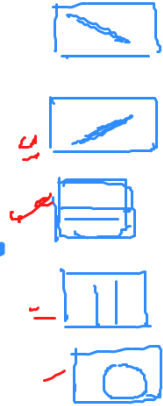
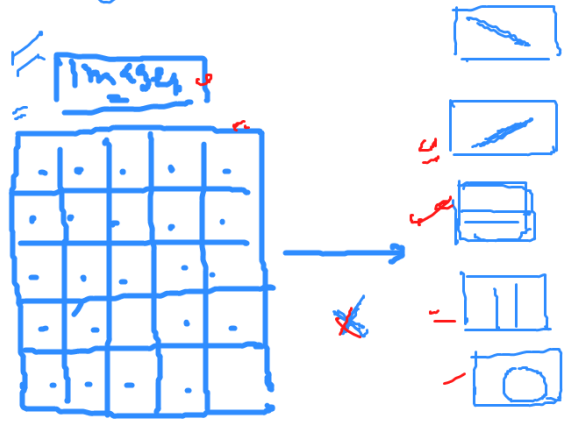


train → CNN

↓
testing



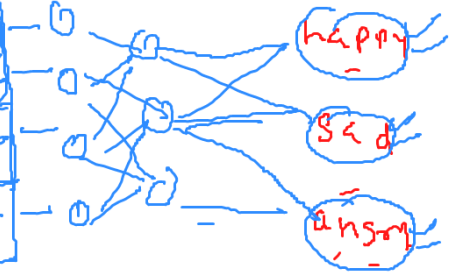
CNN → Image Classification →



O/P



flatten



data

2 feature

Convolution



vertical



Pooling (collect more specific info)

max

min

avg

fully connected layer

multiclass classification

or

binary classification

- ① image.
 - ② feature multiplication
 - ③ pooling.
 - ④ flatten.
 - ⑤ fully connected network.
 - ⑥ o/p
- ① and ② are grouped by a bracket pointing to convolution.



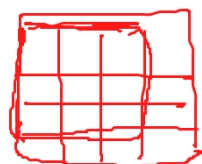
✓

2	4	6	7
10	12	1	0
5	8	7	14
70	35	14	18

✓

Extract feature

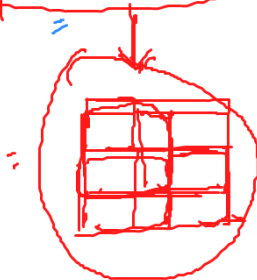
X



✓

0	2	4
1	3	7
8	5	11

✓



6	8	24
10	36	2
40	22	78



Pool

max

.	.
.	.

-
-
-

Input to my ANN

Dim red = (PCR)

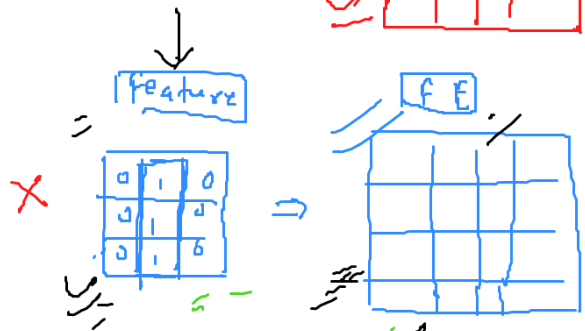
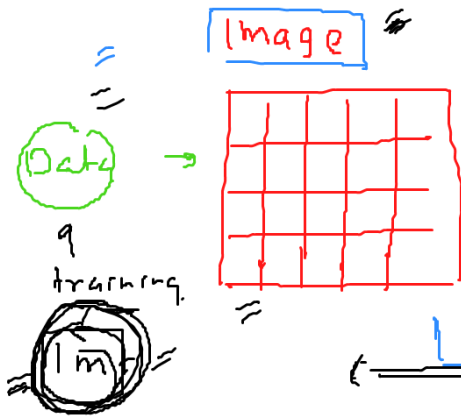
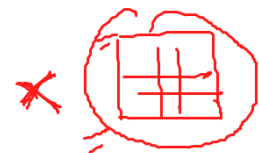
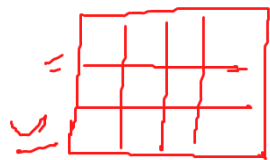
F.S & F.E

Subset of feat
in ML

Deep
learning

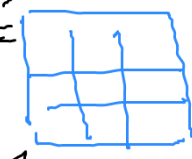
(COCO, MUSE)

image =



more
spatial
info

Pooling



Convolution = $-h \cdot f$

CNN

Supervised algo

Planar array
or
vectors

fully
connected
layer

Our Network

training

testing

different data

transfer

other data

