Padding

Image $\begin{matrix} h \\ 36 \\ 34 \\ 32 \end{matrix} \times \begin{matrix} w \\ 36 \\ \\ \end{matrix}$

400×400
$= 199/200$

3×3 C_1

$= 1 \times 1$

Total layer of Convolution with 3×3 filter

Egyptian Pyramids

18
17

1×1

Trainable Parameters

~~3×3~~
400×400

How many layers ?
Hyperparameter

1920×1080

2000 layers

HD
2018
FHD
2019
QHD
2020
4K
2021
8K

5
↓
Blocks

Egypt → Myan

Max Pooling
Down Sample

Reducing

$h/2$ h/w 76×76 $\times$
$= 38 \times 38$

$\frac{h \times w}{\text{reduction}}$ 50%

$(2,2)$

50%

75%

9	X
X	X

$= (9)$ 1/4

$= 25\%$

$= 75\%$ lost

9	1	2
4	5	6
7	8	0

= 8/9

C
M
C
C
M

=

C
C
C
M

$y = wx + b$

78 x 78 x 3

(2,2) 75%

(3,3) = 88%

(5,5) (7,7)

2015 2012-13 / 14

min avg (max)

5x5

1x1 x 512 / 256

1x1

Rambal machine

MNIST

= I need a network weights where the no of trainable parameters are less than 10000

≤ 99.2 - 99.3

36 x 36 x 3

(3x3) x 64

34x34x64

depth

$h \times w \times d$

flatten / reshape

(2,2)

MP

17x17x64

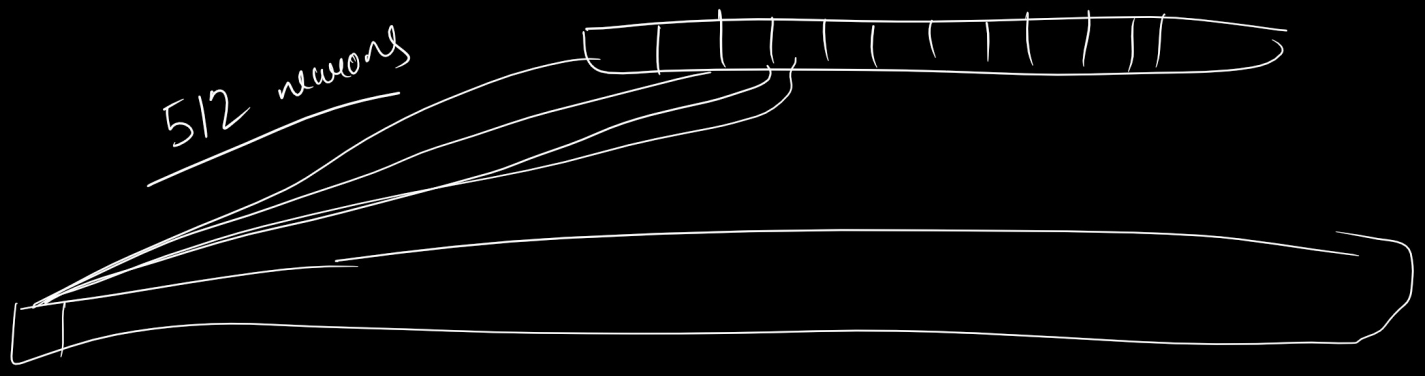
?

3 3 10 = 90

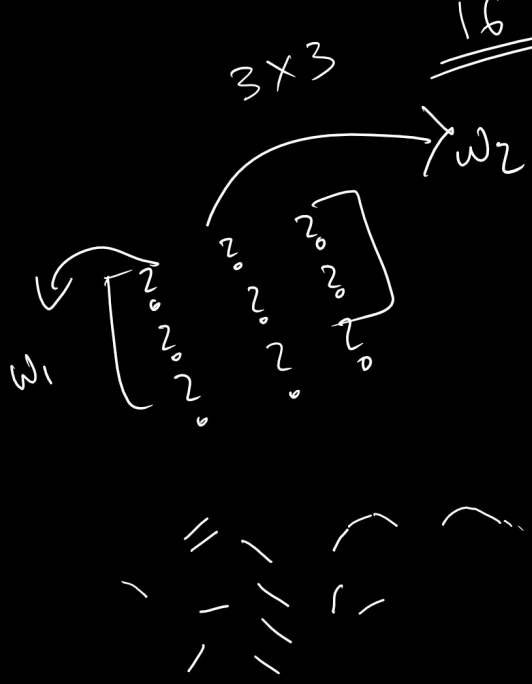
$h \times w \times d$

= [1, 90]

? x 1



how od



Weight Initialization

- Random
- Uniform
- Glorot
- Xavier

Tuesday ML Project

Avnish 8 - 11 PM

Modular & Deployment

30 mins

Machine

Cost

Latency

50L

1 month