deeplearning.ai

Convolutional Neural Networks
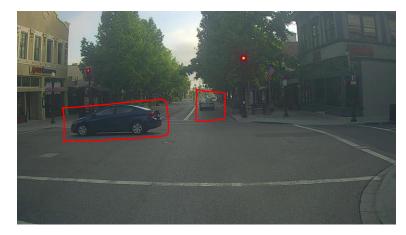
Computer vision

Computer Vision Problems

Image Classification

64x64

$\longrightarrow$ Cat? (0/1)

Neural Style Transfer

Object detection

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Deep Learning on large images

Cat? (0/1)

64x64

$64 \times 64 \times 3$

$\rightarrow 1000 \times 1000 \times 3$ (3MB)

3M

Then $W^{[1]}$ will have dim $= (1000, 3M)$ ie, 3 Billion param

$\rightarrow$ Too many params too much mem.!!

$n^{[1]} = 1000$

$\underline{Solution}$
Use convolutions

x_1

x_2

$\vdots$

x_n

$\hat{y}$

Andrew Ng