Convolutional Neural Networks

Computer vision

deeplearning.ai

Computer Vision Problems

Image Classification

64x64

→ Cat? (0/1)

Neural Style Transfer

Object detection

Andrew Ng

Deep Learning on large images

Cat? (0/1)

64x64 × 3

12288

$1000 \times 1000 \times 3$
$= 3 \text{ million}$

$x \in \mathbb{R}^{3M}$

$W^{[1]}$

$(1000, 3m)$

3 billion

x_1
x_2
$\vdots$
x_n

$\hat{y}$

3M   1000

Andrew Ng