

MLPR Lecture 1

tingurl.com/edmlpr

Lots of information here.

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In lectures:

- Ask questions
- Point out mistakes

After class questions:

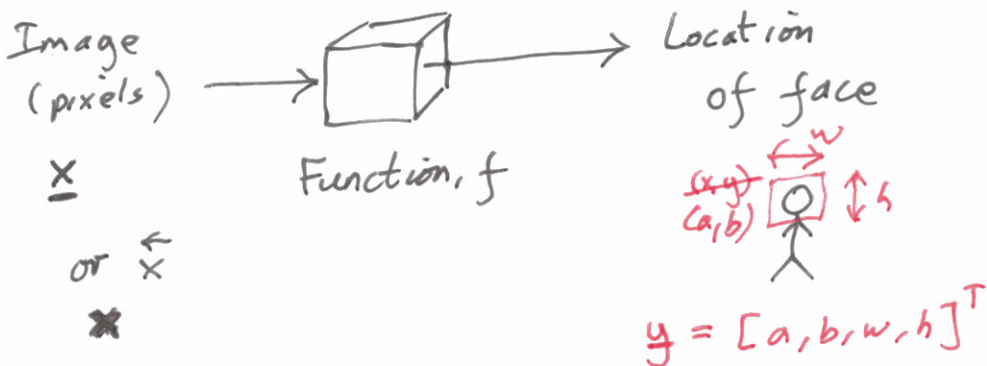
- here briefly
- outside ... or Inf. Forum
- office hour
- hypothesis ← Please sign up and try it out.
- email

Instructions on website.

# Cartoon view of Machine Learning

LI 2018

(2)



Email/text  $\underline{x}$   $\rightarrow$  Label  $f(\underline{x}) \in \{ \text{spam, ok, phishing} \}$

Write  $f$  by hand?

if "Ray-Ban" in  $\underline{x}$ : spam  $+ = 10$

if "IT Help Desk" in  $\underline{x}$ : phishing  $+ = 100$

if "Bayesian" in  $\underline{x}$ : ok  $+ = 10^6$

parameters  $\underline{\theta}$  or  $\underline{w}$  weights

Prediction =  $\text{argmax}(\text{spam, phishing, ok})$

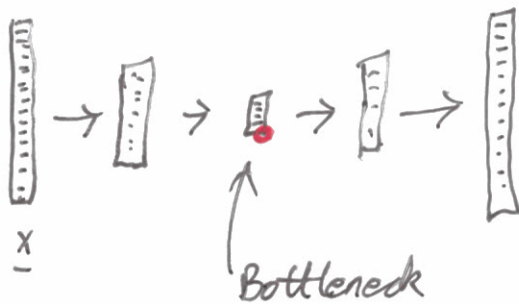
# Auto-encoder

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③



Goal  $f(x) \approx x$



The papers I showed you are linked to in the typeset notes.