Facial Image Quality Estimation

Group 4

Mathematical Model

Let the system be S = { DD, NDD, i/p, o/p, f, S, F } where-

DD : Deterministic Data = { vector features }

features = { x_1, x_2, x_3, … , x_n }

NDD : Non-Deterministic Data = { $\hat{y}$ }

i/p : input = { image }

o/p : output = { quality estimate }

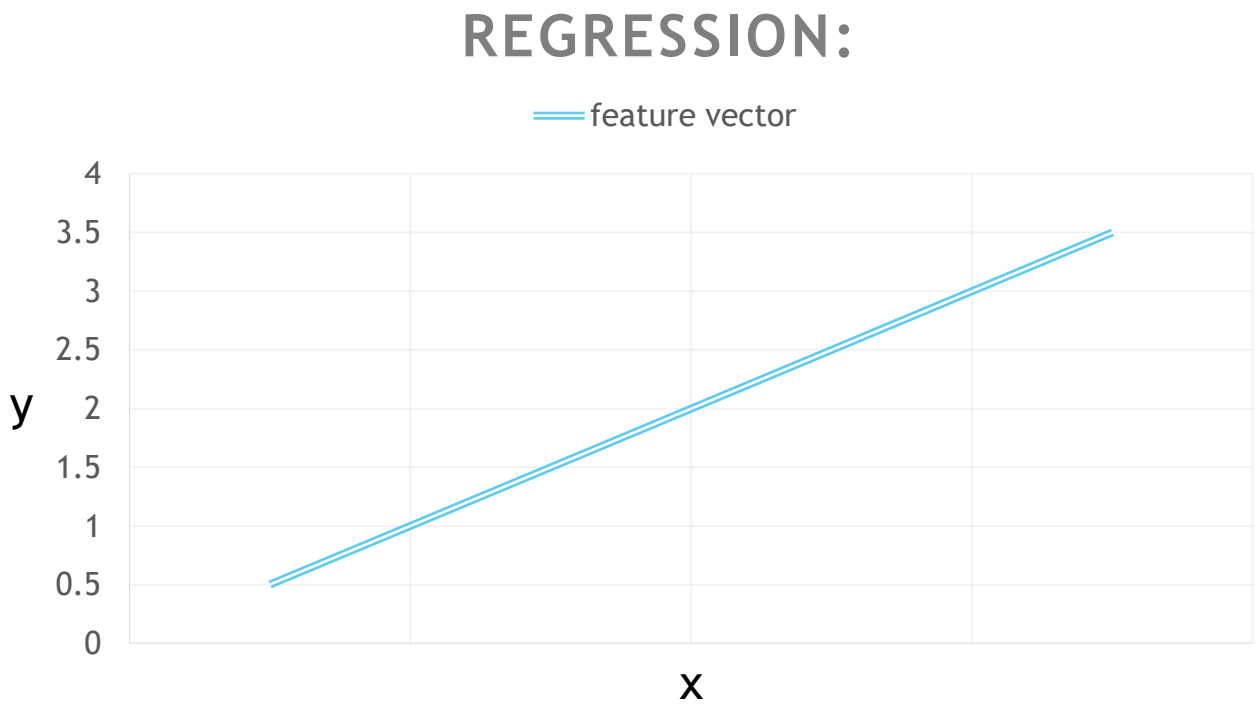
f : functions = { regression_model() }

S : Success = quality estimate is close to matcher's score

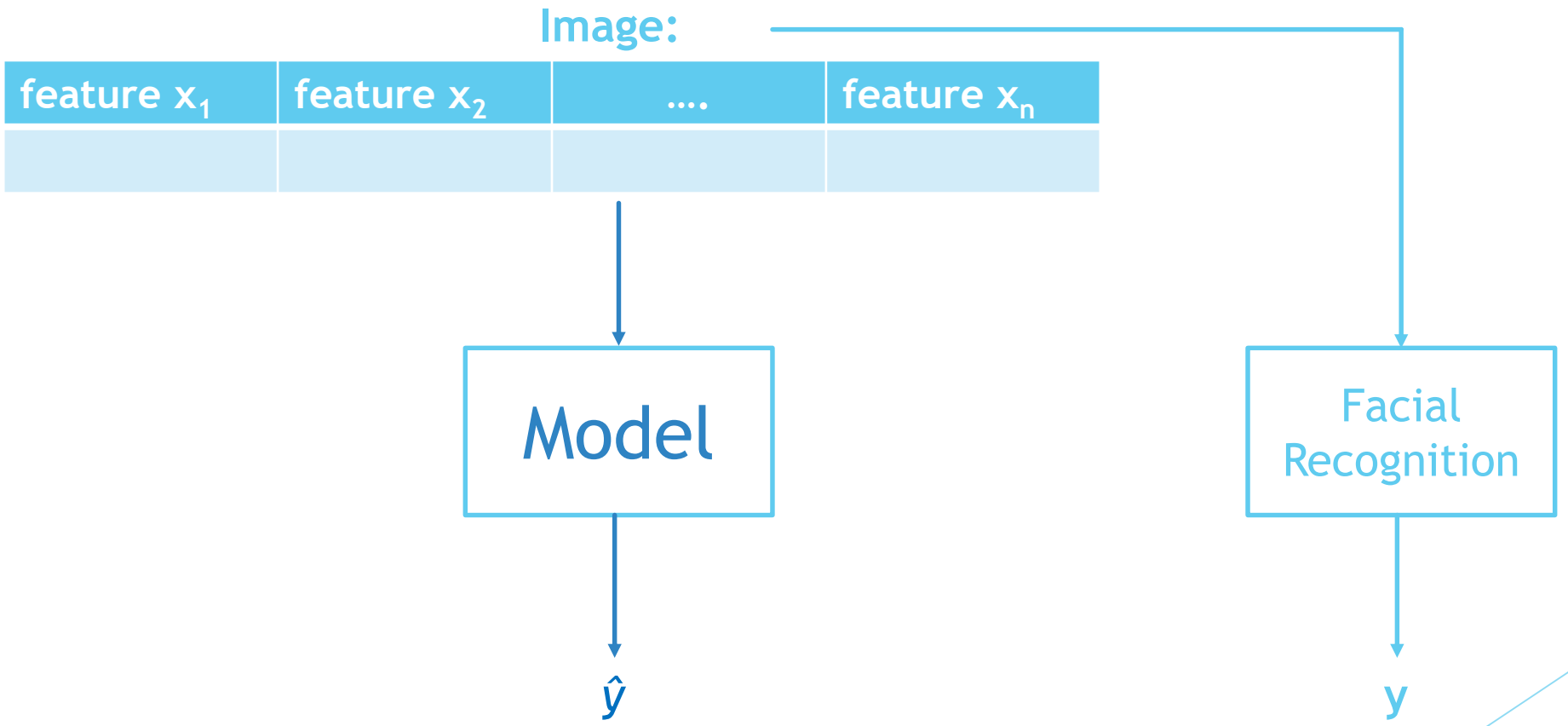
F : Failure = large difference between quality estimate and match score

Training Phase:

feature x_1	feature x_2	….	feature x_n	match score y



Testing Phase:



Evaluating Model