Lecture: 3

Gradient descent with how it works with function of one variable?

C1: with two and multivariables:

gradients → containing list of partial derivatives. show cost changes with r t parameters.

how we will work?

will move in opposite direction to reduce cost by taking small step η.

C2: with ① valiable:

This depends on "slope" and the working is same.

$C = ((w))$ $w \in w - \eta \left(\frac{dC}{dw}\right)$ → Instead of use of partial deri var "only slope" - no

case1: positive slope

$\frac{dc}{dw} > 0$:

curve will move to reduce C, we move left

Case 2: Negative Slope:

$$\frac{dc}{dw} < 0$$

curve falling ⇒ to reduce C, more weight

Case 3: Zero Slope:

$$\frac{dc}{dw} = 0$$

Gradient Step

Flat.