OneNote for Windows 10

Home Insert Draw View Help

Shapes Ink to Shape Ink to Text

100 Days of ML

- Day 32 - Discrtizati...
- Day 33 - Working-...
- Day 34 - Working...
- Day 35 - Complete...
- Day 36 - Handling...
- Day 37 - Handling...
- Day38-Missing Indi...
- Day39 - KNN Impu...
- Day40 - Iterative I...
- Day 41 - Outliers in...
- Day 42 - Outlier De...
- Day 43 - Outlier de...
- Day44 - Outlier De...
- Day 45 - Feature C...
- Day 46 - Curse of...
- Day 47 - PCA
- Day 48 - Simple Li...
- Day 49 - Regressio...
- Day 50 - Multiple L...

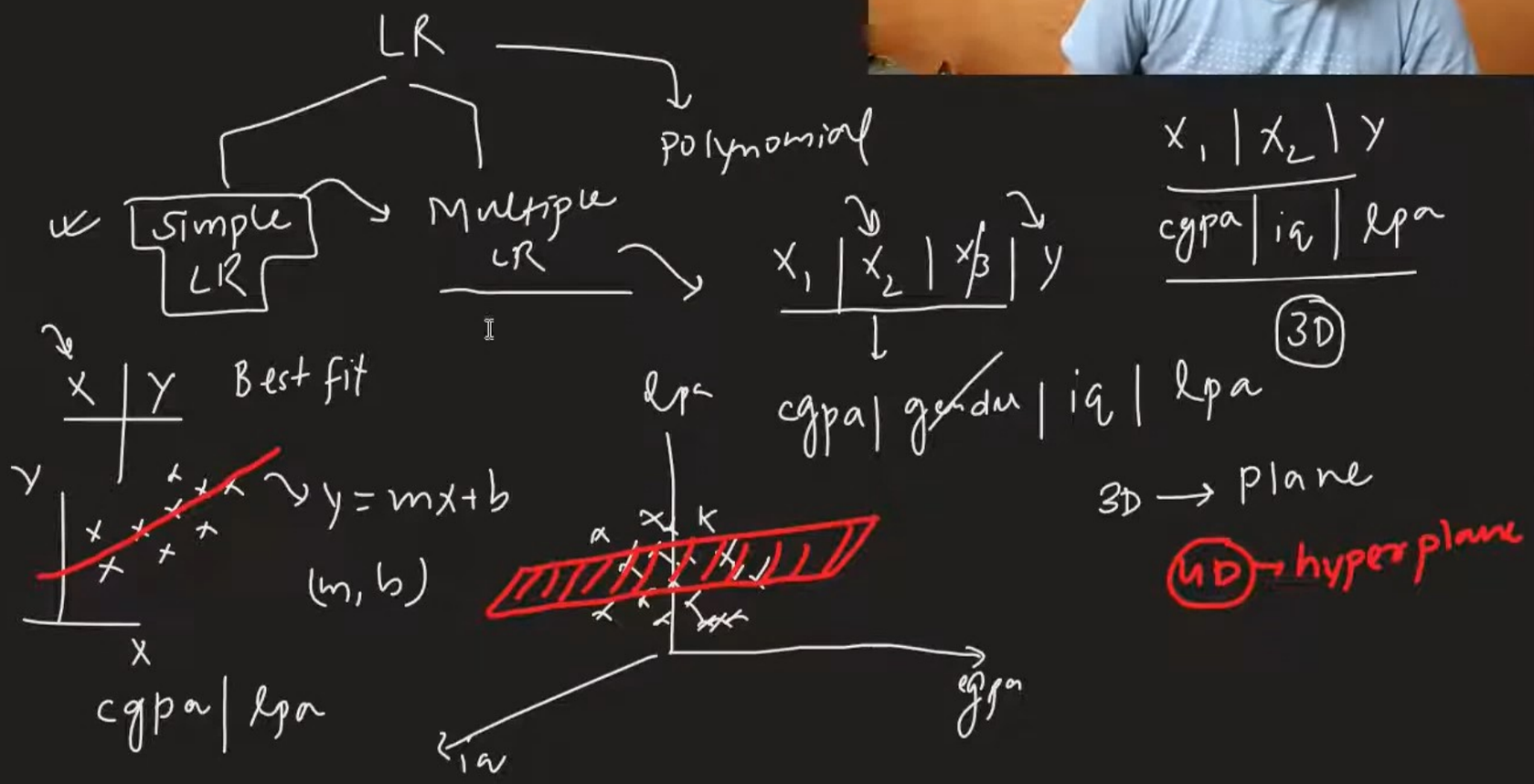
Add section Add page

Multiple Linear Regression

Code Example

Multiple Linear Regression

Friday, May 14, 2021 4:31 PM



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Multiple Linear Regression

Code Example

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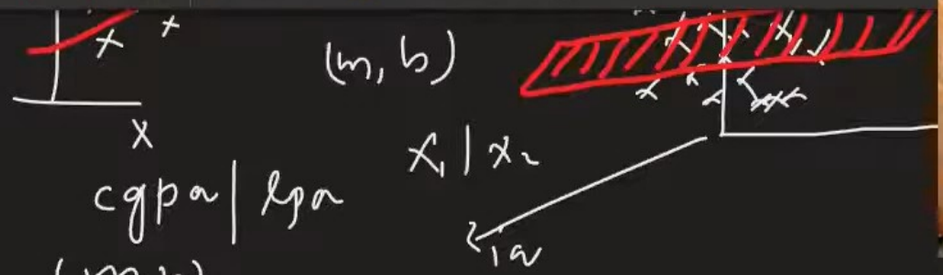

$y = mx + b$

(m, b)

$\beta_1 \quad \beta_0$

β_2

$y = mx_1 + nx_2 + b$

$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2$

$[\beta_0, \beta_1, \beta_2]$

$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3$

$[\beta_0, \beta_1, \beta_2, \beta_3]$

$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \ldots + \beta_n x_n$

$$y = \beta_0 + \sum_{i=1}^{n} \beta_i x_i$$

$n = 1$

$y = \beta_0 + \beta_1 x_1$

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Multiple Linear Regression

Code Example

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots + \beta_n$$

$$Y = \beta_0 + \sum_{i=1}^{n} \beta_i X_i$$

$$Y = \beta_0 + \beta_1 X_1$$

3D

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2$$

$$lpa = \beta_0 + \beta_1 \times (cgpa) + \beta_2 \times (iq)$$

weights (β_1, β_2)

β_0 → offset

x_1 → cgpa

x_2 → iq

y → lpa

β_2 ↓

β_1 ↓

$\beta_1 > \beta_2$

hyperplane