

80% Feb 1 81% Feb 2 ... Feb 13

⇒ Data Preprocessing: $H \Rightarrow$

⇒ Weather Prediction. } Regression Problem.
 ⇒ Temperature prediction }

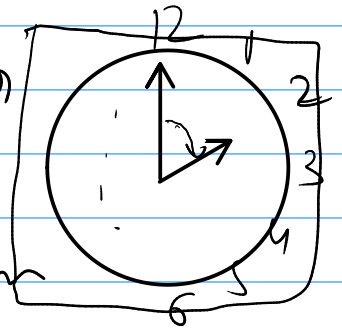
⇒ Stock Price / Algo trading } Backtest

Reliance : 2019 → 400 - 500 Buy - Sell

2021 ⇒ ≈ 1990 intraday

⇒ Male / Female Differentiate Swing trading

Convolutional Neural Network. } Classification
 ↓
 2-class Problem



⇒ Feature Engineering: Preprocess

✓ Height ✓

✓ Weight ✓

Labels

1.7

65

0 Male

1.8

55

0 Male

1.6

50

1 Female

F1 F2 F3

mean = 0

SD = 1

$\underline{X} = X.mean()$ ✓

$\underline{X} = X.std()$ ✓

⇒ Gather Some Data : ⇒ Convert data into tensors

Standard Scalar ✓

Training Set ✓

Testing Set ✓

⇒

Optimisation ✓

Generalisation ✓

Vectorisation

F1

F2

F3

0-1

0-1

0-1

Homogeneous

Boston
Husky

0-1

10-90

50-80

⇒ Optimisation will not happen properly.

⇒ Data Representativeness : Hand written digits

Data

Labels

(1)

0

(2)

1

(3)

2

(4)

3

Mango

Apple

Bananas?

8-9

0

0

0

1

2

3

4

5

6

7

8

9

Shuffle

training & Testing

80%

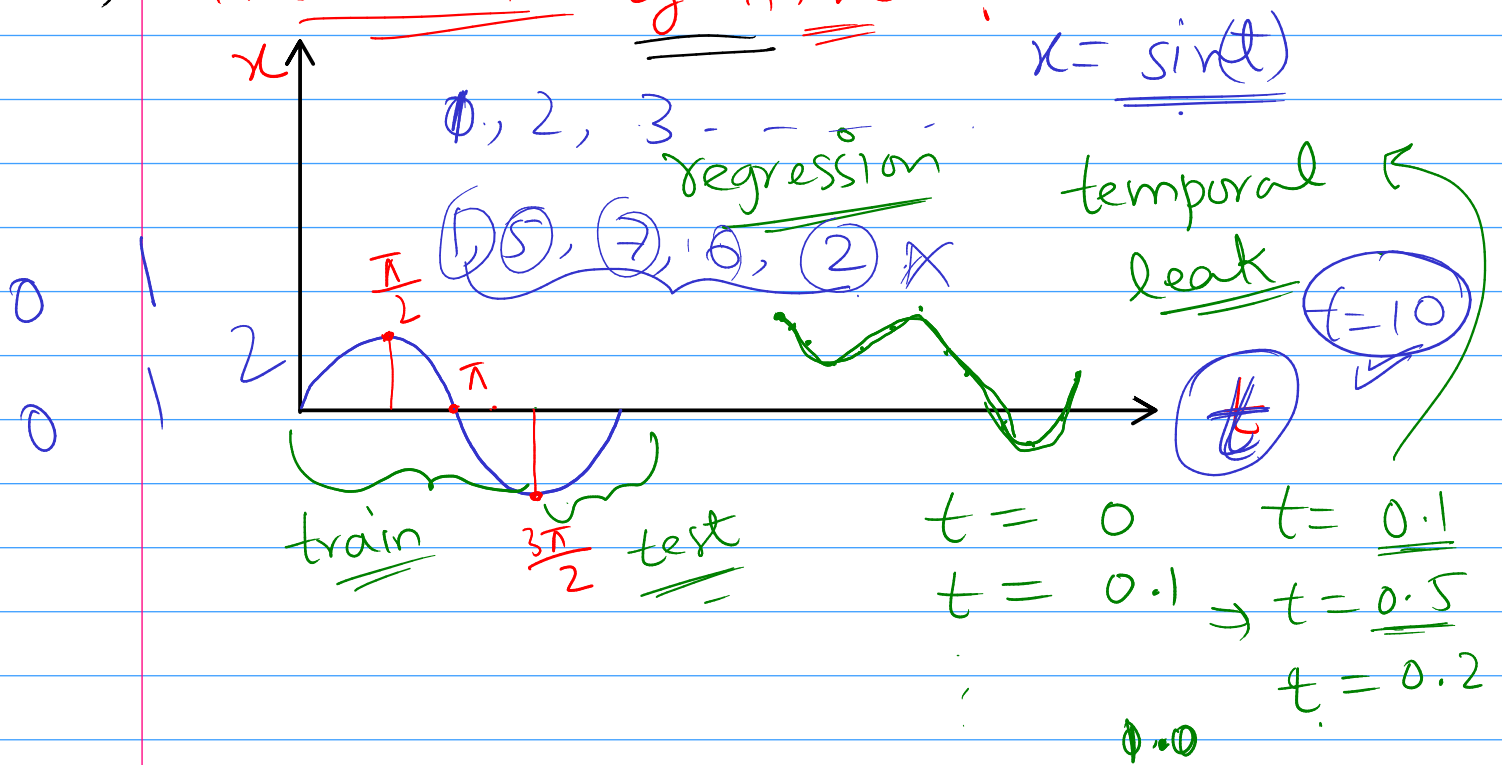
20%

Will it have
Good testing
data accuracy?

NO!!!

⇒ GPT3 → Header, Images ✓

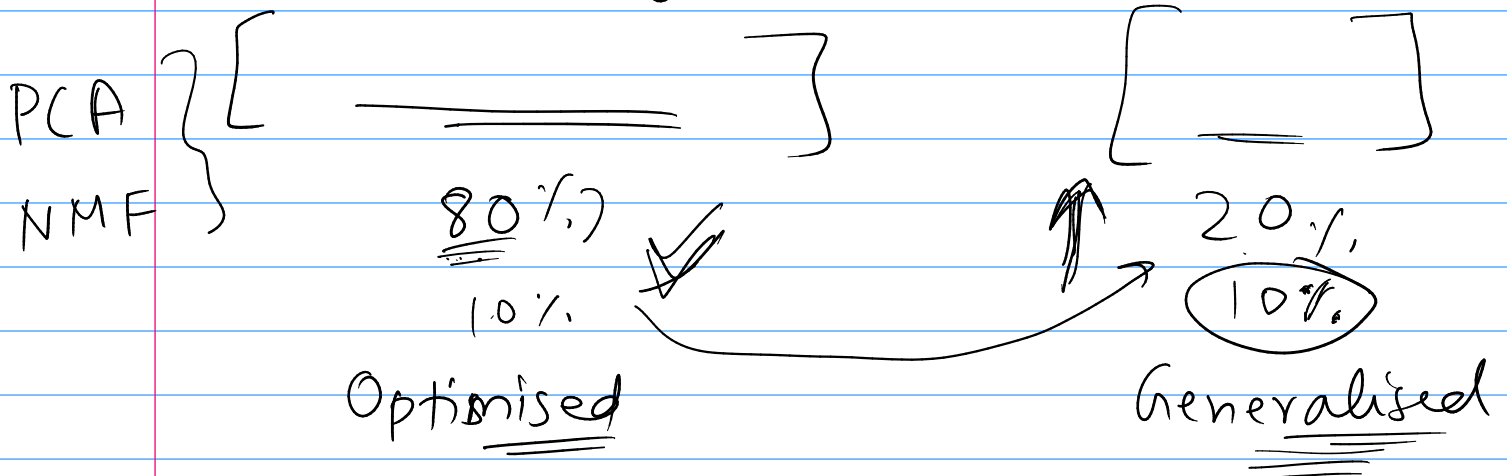
⇒ The Direction of time :



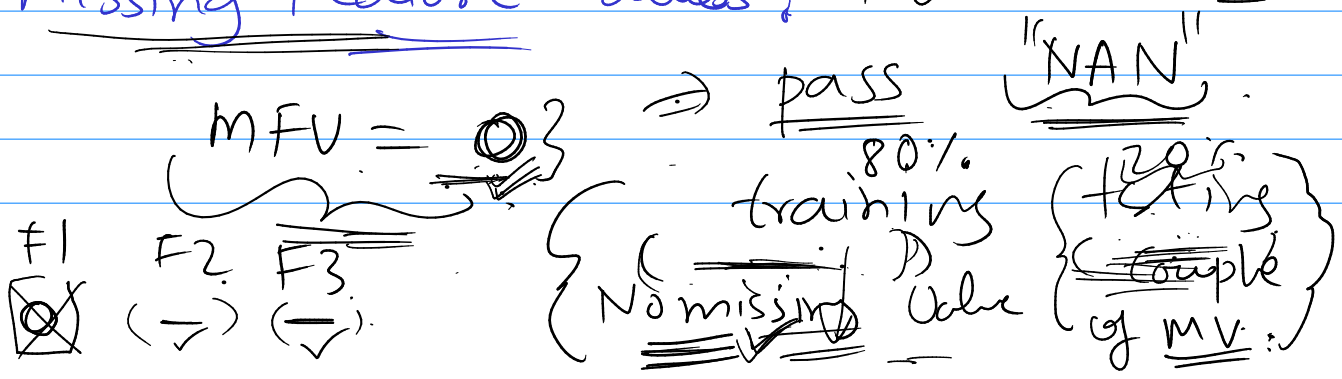
⇒ Redundancy in Your Data!

training

testing



⇒ Missing Feature Values ≠ Not a Number



Machine Learning ✓

X

Deep Learning

~~X~~