CSE445 / L-17 / 23.07.2025 /

Midterm Exam

L-18 / 28.07.2025 /

Binomial Distribution:

$$P(k) = \binom{n}{k} p^k q^{n-k} = \frac{n!}{(n-k)!\ k!} p^k \cdot q^{n-k}$$

Here,

n = number of trials.

k = number of success desired

p = probability of gettings success in one trial.

q = (1-p)

High bias for low variance:

- bias tree amount high (80%)
- variance tree amount low (20%)

L-19 / 30.08.2025 /

* k-means:

⇒ x_i ⇒ initial points or data

⇒ C_i ⇒ initial means

⇒ a_i ⇒ new assignments will change the means and point position.

L-20 / 04.08.2025 /

VIVA

L-21 / 06.08.2025 /

* k-means :

when it is increasing, we will stop the training.

- optimized, means plot (Like a validation curve)

↳ Elbow method, optimization of k-means.

⇒ Each steps calculate the variance, when it is not decreasing or reach the threshold attempts, it will trigger the early stop.

* k-means

~~Algo~~ Aglomerectic Cluster } Unsupervised.

kNN

L-22 / 11.08.2025

Random surprise Quize

L-23 / 13.08.2025

- Reinforcement Learning.

L-24 / 18.08.2025

Final Syllabus

Ch- 7, 8, 9, 10

Final Exam

26.08.2025