

ASSIGNMENT 2

ARTIFICIAL INTELLIGENCE (417)

Q1 :- Multiple Choice Questions (8marks)

a. If model will simply remember the whole training set, and will therefore always predict the correct label for any point in the training set. This is known as _____.

- a. Overfitting b. Overriding c. Over remembering d. None of the above

b. The result of comparison between the prediction and reality can be recorded in what we call the _____.

- a. Overfitting b. Problem Scoping c. Confusion Matrix d. Data acquisition

c. The _____ allows us to understand the prediction results.

- a. Overfitting b. Problem Scoping c. Confusion Matrix d. Data acquisition

d. _____ is defined as the percentage of correct predictions out of all the observations.

- a. Overfitting b. Accuracy c. Confusion Matrix d. Data acquisition

e. _____ is defined as the percentage of true positive cases versus all the cases where the prediction is true.

- a. Overfitting b. Accuracy c. Precision d. Data acquisition

f. _____ can be defined as the fraction of positive cases that are correctly identified.

- a. Recall b. Accuracy c. Precision d. Data acquisition

g. _____ can be defined as the measure of balance between precision and recall.

- a. Recall b. Accuracy c. Precision d. F1 Score

h. _____ is the process of understanding the reliability of any AI model, based on outputs by feeding test dataset into the model and comparing with actual answers.

- a. Evaluation b. Problem Scoping c. Data acquisition d. Data Exploration

Q2:- Fill in the Blanks: (2 marks)

1. The basis of decision making depends upon the availability of _____ and how we experience and understand it. (information/data/conditions/ past experience/ knowledge/awareness.)

2. A machine can also become intelligent if it is trained with _____ which helps them achieve their tasks (data)

Q3:- How AI helps in giving you personalized experience online? (3 marks)

Ans :-AI based recommendations: AI uses advanced machine learning algorithms to analyze browser history, page clicks, social interactions (likes, shares), past purchases, the duration for which a page was viewed, location, etc. to gauge customer interests and preferences. AI can help deliver product recommendations based on frequently bought items, or related products. It can even help customize web pages and elements to suit a customer's needs. For instance, Netflix

does intense behavior analysis based on behavior and demographic data to determine the content that will resonate with their customers.

Chatbots and Automated Messaging: AI-powered chatbots and messaging agents can enhance the customer experience across channels. They can answer simple queries, engage customers, efficiently handle multiple interactions, Automated Service Interactions: AI-driven programs can send automated messages to customers regarding a pending service, a part replacement, or a regular order.

Curating Select Products: Amazon has come up with the concept of the Amazon 4-star retail store. Products that have received a multitude of 4-star ratings will be offered in this physical store. Amazon will use its product recommendation engine to identify trending products and customers' favorites and bring them to a brick and mortar setting

Q3:- How AI make decisions? (2 marks)

Ans :-The basis for decision-making depends on the information that is available and how we perceive and comprehend it. Information in this page refers to our current knowledge, self-awareness, intuition, and past experiences.