

ML Terms You May Encounter in the Exam.

Here are some machine learning terms that you may encounter in the exam.

GPT (Generative Pre-trained Transformer)

- * A model that generates human text or computer code based on input prompts.

BERT (Bidirectional Encoder Representations from Transformer)

- * A language model that reads text in 2 directions.
- * It has similar intent to GPT but makes it great for translation purposes.

RNN (Recurrent Neural Network)

- * A neural network specifically geared to process sequential data. For eg: time series data or texts.
- * It is going to be very helpful for speech recognition or to make time series prediction.

ResNet (Residual Network)

- * It is a type of deep convolutional neural network (CNN)
- * It is used for image recognition tasks, object detection, and facial recognition.
- * ResNet is for images.

SVM (Support Vector Machines)

- * It is an ML algorithm used for classification and regression.

WaveNet

- * WaveNet is a model used to generate raw audio waveform. It is used in speech synthesis.

GAN (Generative Adversarial Network)

- * A model used to generate synthetic data such as images, videos, or sounds that resemble the training data.
- * For example :- a big use case of GAN is going to be data augmentation

* Meaning that when you have a training dataset with underrepresented categories, you can use GAN to generate fake data that still looks like your original data.

* This helps create a more balanced training dataset for your next model.

XGBoost (Extreme Gradient Boosting)

* XGBoost is an implementation of gradient boosting and used for regression.

Exam Strategy

GPT, BERT, and GAN are the ones you want to remember most. Also:-

- ① ResNet is for images
- ② WaveNet is for Audio
- ③ GAN is for creating data augmentation
- ④ GPT & BERT are for language