Your grade: 100%

Your latest: **100%** • Your highest: **100%**
To pass you need at least 80%. We keep your highest score.

Next item →

1. What is a key step in setting up a dataset class for an unlabeled dataset in unsupervised learning? 1 / 1 point

- (•) Defining how to load and preprocess the data
- ( ) Ensuring all data is labeled
- ( ) Removing all non-numeric features
- ( ) Using only a small subset of the data

Correct
Correct! Loading and preprocessing data is crucial for model training.

2. Which of the following are steps involved in performing sentiment analysis using one hot encoding? 1 / 1 point

- [x] Encoding the text data into a one hot encoded format

Correct
Correct! One of the steps involves encoding the text data into a one hot encoded format.

- [ ] Passing the encoded data through a pre-trained language model
- [x] Training a simple neural network on the encoded data

Correct
Correct! Another step involves training a simple neural network on the one hot encoded data.

- [x] Performing tokenization and padding of the text data

Correct
Correct! Tokenization and padding are necessary preprocessing steps before one hot encoding.

- [ ] Using TSNE to visualize the encoded data

3. What is the main concept behind retrieval augmented generation in NLP? 1 / 1 point

- (•) Integrating external knowledge sources to enhance text generation
- ( ) Generating text by using a single, monolithic model without external information
- ( ) Focusing solely on the syntactic structure of sentences during generation
- ( ) Using rule-based systems to generate text based on predefined templates

Correct
Correct! Retrieval augmented generation involves integrating external knowledge sources to improve the quality of generated text.

4. Which of the following techniques can be used to apply sentiment analysis models to different languages using pretrained models? 1 / 1 point

- [x] Using multilingual BERT models

Correct
Correct! Multilingual BERT models can handle multiple languages for sentiment analysis.

- [ ] Training a separate model for each language from scratch
- [x] Using translation APIs to convert text into a single language

Correct
Correct! Translation APIs can help convert text into a single language, allowing the use of pretrained models.

- [x] Fine-tuning a pretrained model on a multilingual dataset

Correct
Correct! Fine-tuning a pretrained model on a multilingual dataset can also be effective for sentiment analysis in different languages.

- [ ] Manually parsing text and building language-specific rules

5. What is one of the key benefits of using skip connections in deep neural networks? 1 / 1 point

- (•) They prevent gradient vanishing and exploding issues.
- ( ) They significantly reduce the computation time required for training.
- ( ) They eliminate the need for any activation functions in the network.
- ( ) They allow networks to use fewer layers without sacrificing performance.

Correct
Correct! Skip connections help in maintaining the gradient flow, preventing it from vanishing or exploding during backpropagation.