References

1. This link is for a GitHub repository that contains code for an AI-based MCQ generator written in Python. The generator uses natural language processing techniques and machine learning algorithms to automatically generate multiple-choice questions from a given text https://github.com/PushkaraSharma/MCQ_Generator.

2. This link is for a GitHub repository that contains code for Sense2Vec, an unsupervised algorithm for generating vector representations of words and phrases, which can be used for natural language processing tasks such as entity recognition and semantic similarity https://github.com/explosion/sense2vec.

3. This link is for a pre-trained T5 (Text-to-Text Transfer Transformer) language model developed by Hugging Face. T5 is a state-of-the-art transformer-based model that can be fine-tuned for various natural language processing tasks such as question answering, summarization, and text classification https://huggingface.co/t5-base..

4. This link is for a Python file in the pke (Python Keyphrase Extraction) library that contains code for MultiPartiteRank, an unsupervised graph-based algorithm for extracting keyphrases from a given text. MultiPartiteRank uses a combination of lexical, syntactic, and semantic features to score candidate phrases and extract the most relevant ones https://github.com/boudinfl/pke/blob/master/pke/unsupervised/graph_based/multipartiterank.py.

5. This link is a blog post on Towards Data Science that describes a method for generating distractors (incorrect answer options) for multiple-choice questions using word vectors, sentence transformers, and the Maximal Marginal Relevance (MMR) algorithm. The method involves clustering similar words and phrases from the text to create distractors that are plausible but

semantically distinct from the correct answer option" https://towardsdatascience.com/generate-distractors-for-mcqs-using-word-vectors-sentence-transformers-and-mmr-algorithm-e3e5b3a90076?gi=b8a940b15051".

6. This link is for the Wikipedia page on Transformer, a machine learning model that uses self-attention mechanisms to process sequences of input data, such as natural language text. Transformers have become the dominant architecture for various natural language processing tasks, such as language translation, text generation, and question answering https://en.m.wikipedia.org/wiki/Transformer_(machine_learning_model).

7. This link is for a GitHub repository that contains code for Questgen.ai, an AI-based question generation framework developed by Ramsri Goutham. The framework uses natural language processing techniques and machine learning algorithms to automatically generate questions from a given text, which can be used for various educational and training purposes https://github.com/ramsrigouthamg/Questgen.ai/tree/master/Questgen.

8. This link is a blog post on Towards Data Science that describes a practical method for automatically generating multiple-choice questions (MCQs) from any content using the BERT (Bidirectional Encoder Representations from Transformers) language model. The method involves using BERT to extract important sentences from the content and then generating MCQs based on those sentences https://towardsdatascience.com/practical-ai-automatically-generate-multiple-choice-questions-mcqs-from-any-content-with-bert-2140d53a9bf5.

9. This link is for a Hugging Face space that contains a pre-trained MCQ (Multiple Choice Question) generator model developed by Saif Ahmad. The model uses the T5 (Text-to-Text Transfer Transformer) architecture and can be fine-tuned for generating

MCQs from a given text passage https://huggingface.co/spaces/beSaif/mcq-generator.

10. This link is a blog post on Towards Data Science that describes three methods for generating distractors (incorrect answer options) for multiple-choice questions using natural language processing techniques. The methods include rule-based approaches, distributional semantics, and generative language models, and are illustrated with examples using Python code https://towardsdatascience.com/3-ways-to-generate-distractors-wrong-choices-for-mcqs-using-natural-language-processing-d52477a56812.

11. This link is for a research paper available on ResearchGate that provides a survey of the state-of-the-art methods for automatic generation of multiple-choice questions (MCQs) from text. The paper discusses various approaches for MCQ generation, including rule-based, template-based, and machine learning-based methods, and highlights the challenges and future directions in this area https://www.researchgate.net/publication/329847554_Automatic_Multiple_Choice_Question_Generation_From_Text_A_Survey.

12. This link is for a Hugging Face model hub page that contains a pre-trained model for generating distractors (incorrect answer options) for multiple-choice questions using the BART (Bidirectional and Auto-Regressive Transformers) language model. The model is trained on the BOTH dataset, which includes questions from a variety of domains https://huggingface.co/voidful/bart-distractor-generation-both.

13. This link is a blog post on Towards Data Science that provides a comprehensive overview of text preprocessing techniques for natural language processing (NLP) and machine learning tasks. The post covers topics such as tokenization, stemming and lemmatization, stop word removal, and feature extraction, and includes Python code examples for each technique https://towardsdatascience.com/all-you-need-to-know-about-text-preprocessing-for-nlp-and-machine-learning-bc1c5765ff67.

14. "Automatic Generation of Multiple Choice Questions using NLP" by N. L. Bansal and N. Mittal, International Journal of Computer Applications, 2018.

15. "AI-based MCQ Generation System" by A. K. Jena and S. K. Nayak, International Journal of Innovative Technology and Exploring Engineering, 2019.

16. "AI Based Question Generation for Educational Content" by A. Arora, R. Jain, and S. Verma, Proceedings of the International Conference on Machine Learning, Big Data, Cloud and Parallel Computing, 2020.

17. "Question Generation Using Artificial Intelligence Techniques: A Review" by R. Singh and G. Singh, Proceedings of the International Conference on Emerging Trends in Information Technology and Engineering, 2021.

18. "Deep Learning based MCQ Generation for Online Assessments" by S. S. Sengar, S. K. Patel, and S. K. Singh, Proceedings of the International Conference on Inventive Communication and Computational Technologies, 2021

19. "Automated Multiple Choice Question Generation from Textbook Material Using GPT-3" by Aron Szanto and Gabor Pinter (2021)
20. "Automated Generation of Multiple Choice Questions Using Semantic Roles and Textual Entailment" by Soumajit Pramanik and Debanjan Banerjee (2021)
21. "Automated Multiple Choice Question Generation from Textbook Passages Using Transformers" by Naman Kundra, Satyajit Singh and Rajiv Ratn Shah (2021)
22. "Generating Multiple Choice Questions from Text Using the BERT Model" by Yixin Nie, Yaowei Wang, Feng Shi and Tiejian Luo (2020)

23. "A Novel Multiple Choice Question Generation System based on Word Embedding and Knowledge Graphs" by Yilin Zheng, Siyao Cheng, Zhichao Li and Liqiang Nie (2020)
24. "A Survey of Automatic Multiple Choice Question Generation Techniques" by Mohammad Ehsanul Karim and Mohammed Hasanul Kabir (2020)
25. "Automated Generation of Multiple Choice Questions Using a Combination of Rule-Based and Deep Learning Techniques" by Prafulla Kumar Choubey and Chiranjoy Chattopadhyay (2019)
26. "Automatic Generation of Multiple-Choice Questions from Textbooks" by Lei Zhang and Zhiqiang Cai. In Proceedings of the 11th International Conference on Intelligent Tutoring Systems, 2012.
27. "Automatic Multiple Choice Question Generation from Educational Texts" by Hady Elsahar, Aly Fahmy, and Mohamed Elfeky. In Proceedings of the 11th International Conference on Computer Engineering & Systems (ICCES), 2016.
28. "Automatic Generation of Multiple-Choice Questions from Texts Using Paragraph Vectors and Semantic Word Clustering" by Kaidi Zhang, Yongqiang Li, and Zhen Li. In Proceedings of the 10th International Conference on Education Technology and Computers (ICETC), 2018.
29. "A Hybrid Approach for Automatic Generation of Multiple-Choice Questions from Texts" by Yu Sun, Jinyuan Wang, and Huaping Zhang. In Proceedings of the 2nd International Conference on Computer Science and Application Engineering (CSAE), 2019.
30. "Generating Multiple-Choice Questions from Text using Deep Learning" by Xinyue Cao, Xiaodong Zhang, and Alexander G. Hauptmann. In Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing (EMNLP-IJCNLP), 2019.
31. "Automatic Generation of Multiple-Choice Questions from Video Lectures" by Muhammad Tariq Mahmood, Waleed Bin Shahid, and Muhammad Abdul Qadir. In Proceedings of the 5th International Conference on Frontiers of Educational Technologies (ICFET), 2021.

32. "Enhancing Multiple-Choice Question Generation through Knowledge Graphs" by Y. Chen, J. Liu, and Y. Lin (2023). The authors of this paper propose a method for enhancing MCQ generation through the use of knowledge graphs.

33. "Machine Learning Based Multiple Choice Question Generation: A Comprehensive Review" by S. Sharma and A. Singh (2023). In this paper, the authors provide a comprehensive review of machine learning-based methods for generating MCQs.

34. "Automatic Generation of Multiple-Choice Questions from Text using Pre-trained Language Models" by R. Alsaedi, M. Alshehri, and M. Alrashed (2022). The authors of this paper propose a method to generate MCQs from text using pre-trained language models.

35. "Integrating Deep Learning and Natural Language Processing for Multiple-Choice Question Generation" by H. Hu, Y. Zhang, and X. Liu (2022). This paper presents a deep learning-based method for generating MCQs, which uses natural language processing techniques.

36. "Automatic Generation of Multiple-Choice Questions Using GPT-3" by Y. Hu, Y. Liu, and C. Li (2022). In this paper, the authors propose a method to generate MCQs using GPT-3 language model.