

Diary Entry - Week 15

Date: 21-10-2024 to 25-10-1024

Summary:

Week 15 focused on exploring trees in data structures and algorithms, the GloVe vectorizer, and neural language models.

Trees in Data Structures and Algorithms:

- Delved into the concept of trees as hierarchical data structures, understanding their properties and various types, including binary trees, binary search trees, and balanced trees.
- Explored tree traversal algorithms such as in-order, pre-order, and post-order traversal, along with their applications in tree manipulation and searching.

GloVe Vectorizer:

- Investigated the Global Vectors for Word Representation (GloVe) technique for generating word embeddings.
- Discussed the principles behind GloVe vectorization, emphasizing its effectiveness in capturing global word co-occurrence statistics for embedding generation.

Neural Language Models:

- Explored neural language models as advanced techniques for language modeling, including recurrent neural networks (RNNs) and transformers.
- Discussed the architecture and training process of RNN-based language models, along with their applications in tasks such as text generation and sentiment analysis.

Coding Challenge - Week 10:

Participated in the coding challenge focusing on trees in data structures and algorithms, the GloVe vectorizer, and neural language models.