Vector Embeddings and Semantic Retrieval

Introduction

Embeddings are numerical representations of text, images, or audio that preserve semantic meaning. They are essential for modern retrieval and similarity-based tasks.

Embedding Models

• Word2Vec and GloVe (static) • BERT, Sentence-BERT, and E5 (contextual) • Multilingual and domain-specific embeddings

Applications

• Semantic search • Clustering and anomaly detection • Text classification and sentiment analysis