

Yardstick Task 2

1. Fine-tuning the Vector Embeddings for Domain-Specific Knowledge

In my current setup, I'm using a pre-trained model (deepset/roberta-base-squad2) to generate embeddings, which are then indexed in Pinecone for retrieval. While this approach works well for general queries, it could be optimized by fine-tuning the embeddings specifically for the domain of Yardstick Software Solutions. By doing so, I can ensure that the model better understands the kinds of questions and answers related to the services and industries I'm focusing on.

2. Query Expansion with Semantic Search

The second technique I would implement is **Query Expansion**. Currently, the model retrieves answers based on an exact match between the query and the stored embeddings. However, users might phrase the same question in many different ways, which could make it challenging to retrieve the most relevant answer every time. Query expansion helps to address this problem by adding more context to the user's query.