Problem Statement

Develop a model to analyze the videos and recommend related videos (having similar context)

Proposed solution

Word embeddings are a powerful way to represent the latent information contained within words, as well as within documents (collections of words). Using a dataset of videos, which includes audio converted to text, sentiment, topic, and popularity (# shares, # views, # likes & # comments), derive videos' relationships to one another through their respective embeddings.

Zee Media has a huge library of vernacular videos (primarily in Hindi & English) created over a period. The application will analyze these videos including available metadata and converting videos into n (say 300 dim) dimensional embeddings in form of video2vec. This way the algorithm would directly map the video in the vector space(video2vec) using available metadata and both the text and image frames internally and then run a simple Knn model or so to get the recommendations.

This is one way of solving. We may explore other ways of solving in the initial research phase.

The goals of the project are:

- Convert the video to audio and text, using <name of the ML model>
- Use word2vec to create word embeddings using < Skip-gram >, then visualize them as clusters using < K-Means >

  or

- Directly map the video in the vector space (video2vec) using both the text and images internally
- Derive videos' relationships to one another using KNN model or so and recommend related videos which have been watched in similar context.