

Here are 3 Project Ideas revolving Time Series, NLP & Deep Learning:-

1. **Sentiment Analysis with Amazon Review Dataset:** To perform sentiment analysis on an Amazon product review dataset and build a model that can classify customer reviews as positive, negative, or neutral.
Categorize reviews into sentiment labels, such as positive, negative, or neutral, based on the star ratings. For example, we can consider reviews with 4 or 5 stars as positive, 1 or 2 stars as negative, and 3 stars as neutral. With this Project, companies can understand and respond to customer feedback effectively. The Project will be done using NLP.
2. **Sales Forecasting:** Forecast future Walmart sales in a time series dataset. We are predicting item sales at stores in various locations for two 28-day time periods. The Datasets have hierarchical sales data from Walmart, the world's largest company by revenue, to forecast daily sales for the next 28 days. The data, covers stores in three US States (California, Texas, and Wisconsin) and includes item level, department, product categories, and store details. In addition, it has explanatory variables such as price, promotions, day of the week, and special events. Together, this robust dataset can be used to improve forecasting accuracy.
3. **Humpback Whale Identification:** After centuries of intense whaling, recovering whale populations still have a hard time adapting to warming oceans and struggle to compete every day with the industrial fishing industry for food. To aid whale conservation efforts, scientists use photo surveillance systems to monitor ocean activity. They use the shape of whales' tails and unique markings found in footage to identify what species of whale they're analyzing and meticulously log whale pod dynamics and movements. For the past 40 years, most of this work has been done manually by individual scientists, leaving a huge trove of data untapped and underutilized. This training data contains thousands of images of humpback whale flukes. Individual whales have been identified by researchers and given an Id. The challenge is to predict the whale Id of images in the test set. What makes this such a challenge is that there are only a few examples for each of 3,000+ whale Ids.
4. **Movie Recommendation System using Deep Learning:** Develop a Recommendation system based on 3 Filtering:- Demographic, Content & Collaborative Filtering using the MovieLens 20M Dataset in Kaggle. Then end goal is to suggest movies to users based on their demography, previous interactions and preference. We will use Deep Learning Technologies instead of traditional methods like Clustering, KNN & Matrix Factorization.