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(57) Abstract :
Mining textual documents such as Bible corpus has plethora of applications in the real world. Particularly summarization and sentiment analysis have their role in such applications. The current invention is meant for an efficient generative process modelling for summarization of Bible data towards sentiment analysis. It exploits topic modelling based on Latent Dirichlet Allocation for text summarization. On top of text summarization technique, deep learning (ML) based Sentiment Analysis is made. An improved Long Short Term Memory (LSTM) based deep learning model is used for sentiment classification. The summarization process leverages the aspect based sentiment analysis in terms of speed and accuracy. The current invention has strong pre-processing of Bible documents using NLP and text mining techniques. This will result in more efficient means to proposed topic modelling for text summarization. The summarization outcomes are further used in aspect based sentiment analysis that bestows more useful insights on the sentiments associated with the text corpora. The current invention has provision for generative process model, text mining and deep learning. It is beneficial to many stakeholders such as Bible readers, Bible institutions, cloud based ML service providers, researchers and academia.

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