SNO	LITERATURE	METHODOLOGY	MERITS	DEMERITS
1	Prediction of weather induced airline delays based on machine learning algorithms	Experimented predicting delay using supervised machine learning algorithms. Uses SMOTE for weaker class sampling	Found weather causes to be amounting to a significant percent of delay.	Not taken spatial dependencies into account. Amount of delay could have been found.
2	Flight delay prediction from spatial and temporal perspective	ST-Random Forest for flight delay prediction using spatial features of aviation network and temporal correlation of weather condition and airport crowdedness on flight delays.	A real-time, highly accurate prediction system that guaranties the influence of the air traffic network in the prediction.	Overfitting might occur due to LSTM.
3	Study of Flight Departure Delay and Causal Factor Using Spatial Analysis	Assuming delay as a spatially dependent variable, finds delay distribution pattern to predict delay.	Considers spatial factors, people, day types and time ranges of a day to contribute to the prediction	Some of the attributes considered cannot be obtained on large scale in real time
4	Predicting flight delay based on multiple linear regression	A multiple linear regression algorithm to predict delay	Both airline and weather features are taken into consideration.The methodology used in this gives better results compared to NaiveBayes and C4.5 approach	Predicts only the flights which are delayed above 30 minutes
5	Flight Delay Prediction System	Supervised Machine Learning algorithm using Naive Bayes	Considers independence among the predictors making the system scalable. Good for	Does not take into account the impact of unprecedented reasons such as major

			real time prediction	calamities in flight delays
6	Flight delay forecasting and analysis of direct and indirect factors	LSTM network with attention mechanism to remember spatial dependencies	Direct and indirect causing factors are weighed differently.	Air interaction of flights not taken into account
7	A deep learning approach to flight delay prediction	A deep RNN and LSTM approach to prediction; uses limited data attributes	Predicting two sections namely day prediction and flight prediction seems more reasonable and can give more insights for the airport managers to make necessary arrangements	Air traffic/flight interaction doesnt play great roles. Biased towards weather attributes.
8	Predicting flight delay based on multiple linear regression	A multiple linear regression algorithm to predict delay	Both airline and weather features are taken into consideration.The methodology used in this gives better results compared to NaiveBayes and C4.5 approach	Predicts only the flights which are delayed above 30 minutes
9	Flight delay prediction based on aviation big data and machine learning	Comparison of LSTM and Random forest; Uses ADS-B data for improved accuracy	Use of ADS-B can be seen promising. Showed that LSTM suffers from overfitting on test set.	Deployment of ADS-B is hectic. More data handing takes place.3