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LITERATURE REVIEW – FLIGHT DELAY PREDICTION MODEL

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LITERATURE REVIEW

S.No	Author	Title of the paper	Year of publication	Algorithm/ Method	Results
1.	Guan Gui, Fan Liu, Jinlong Sun, Jie Yang, Ziqi Zhou, Dongxu Zhao	Flight Delay Prediction Based on Aviation Big Data and Machine Learning	18 November 2019	Long- Short Term Memory (LSTM) based method, Random Forest based model	Experimental results show that long short-term memory (LSTM) is capable of handling the obtained aviation sequence data, but overfitting problem occurs in our limited dataset.

					Compared with the previous schemes, the proposed random forest-based model can obtain higher prediction accuracy (90.2% for the binary classification) and can overcome the overfitting problem.
2.	Kaiquan Cai, Yue Li, Yi-Ping Fang, Yanbo Zhu,	A Deep Learning Approach for Flight Delay Prediction Through Time-Evolving Graphs	12 August 2021	Graph Convolutional Neural Network (GCN)	Through extensive experiments, it has been shown that the proposed approach outperforms benchmark methods with a satisfying accuracy

					improvement at the cost of acceptable execution time. The obtained results reveal that deep learning approach based on graph-structured inputs have great potentials in the flight delay prediction problem.
3.	Zhen Guo, Bin Yu, Mengyan Hao, Wensi Wang, Yu Jiang,	A novel hybrid method for flight departure delay prediction using Random Forest Regression and Maximal	September 2021	Hybrid method of Random Forest Regression and Maximal Information	The proposed RFR-MIC model exhibits good performance compared with linear regression (LR),

	Fang Zong	Information Coefficient		Coefficient (RFR-MIC)	k-nearest neighbors (k-NN), artificial neural network (ANN), and standard Random Forest Regression (RFR). The results also show that flight information on multiple air routes can certainly improve the accuracy of flight departure delay prediction.

4.	Fan Liu, Jinlong Sun, Miao Liu, Jie Yang, Guan Gui	Generalized Flight Delay Prediction Method Using Gradient Boosting Decision Tree	30 June 2020	Gradient boosting decision tree (GBDT) based model	Experimental results show that the proposed GBDT-based model can obtain higher prediction accuracy (87.72% for the binary classification) when handling limited dataset.

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