

LITERATURE SURVEY

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S.No	TITLE	PROPOSED WORK	TOOLS / ALGORITHM USED	TECHNOLOGY	ADVANTAGES/ DISADVANTAGES
1.	Flight Delay Prediction Using Supervised Machine Learning	In this task, we focus on the flight delay that has been predicted by collecting data, which mainly relies on the destination and their connecting routes, using a supervised machine learning algorithm for the classification of flight delays.	<ul style="list-style-type: none">● Decision tree● SPARK software● Statistical Models	APPLIED DATA SCIENCE	<p>ADVANTAGES:</p> <ul style="list-style-type: none">● The supervised machine learning algorithm for classification produces higher accuracy.● Can process about a large amount of complex data. <p>DISADVANTAGES :</p> <ul style="list-style-type: none">● Storage processing can be done for only about 2TB.● Requires more processing time And low accuracy rate.

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2.	Flight Delay Prediction Using Supervised Machine Learning	This study is about an optimized forecasting model based on deep learning which engages the LM algorithm. Where two other structures are created to study and validate the positive effect of denoising autoencoder and LM algorithm.	<ul style="list-style-type: none"> ● Levenberg - Marquart algorithm ● Root Mean Square Error ● Linear Regression 	APPLIED DATA SCIENCE	<p>ADVANTAGES:</p> <ul style="list-style-type: none"> ● Accuracy of SDA-LM model with imbalanced dataset respectively is greater Than SAE-LM model ● Proposed model has greater accuracy in forecasting fight delay compared to the previous model called RNN <p>DISADVANTAGES</p> <ul style="list-style-type: none"> ● Dataset should be balanced instead of under-sampling and up-sampling

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3.	Flight delay prediction using supervised machine learning	The main objective of the proposed system is to predict the delays of flights prediction will be done using the Backpropagation network and Radial Basis function and in the end, the one with the most accuracy will be considered an efficient model and employed.	<ul style="list-style-type: none">● Radial basis Neural Network● Backpropagation Algorithm	APPLIED DATA SCIENCE	ADVANTAGES: <ul style="list-style-type: none">● RBFs can be trained much faster than the perceptron.● The smallest training error was achieved with RBFN DISADVANTAGES: <ul style="list-style-type: none">● The dataset used was not large enough

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4.	Flight delay prediction using supervised machine learning	The goal of this task is to assess the viability and efficacy of the HDL model in comparison to a feed-forward ANN and gradient-boosted tree machine learning (XGBoost).	<ul style="list-style-type: none">● XGBoost● Hybrid Deep Learning.	APPLIED DATA SCIENCE	ADVANTAGES: <ul style="list-style-type: none">● The model will likely outperform the XGBoost model If weather data included DISADVANTAGES: <ul style="list-style-type: none">● The HDL model did not result in the highest accuracy compared to the ANN model

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5.	Flight Delay Prediction Using Supervised Machine Learning	<p>The main aim of this study is to explore the stability of the Stacking algorithm. Stacking is a combination of different algorithms with different performances.</p> <p>The design of this experiment is to verify how strong or weak learners affect the Stacking performance.</p> <p>The experiment result determines whether strong learners or weak learners are removed, the overall accuracy of the Stacking has no obvious difference.</p>	<ul style="list-style-type: none">● SMOTE algorithm● k - fold● Features Selection● Boruta algorithm	APPLIED DATA SCIENCE	<p>ADVANTAGES :</p> <ul style="list-style-type: none">● Overall accuracy remained the same when the algorithm stacking was implemented <p>DISADVANTAGES:</p> <ul style="list-style-type: none">● It does not add exact weather-related features in the prediction mode

THANK YOU