**DEVELOPING A FLIGHT DELAY PREDICTION MODEL USING MACHINE LEARNING**

Submitted By

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**LITERATURE SURVEY**

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| **TITLE** | **AUTHOR** | **ALGORITHM** | **ADVANTAGES** | **DISADVANTAGE** |
| Flight Departure  Time Prediction  Based on Deep  Learning | Hang Zhou,  Weicong Li,  Ziqi Jiang, Fanger Cai and Yuting  Xue | DEEP  LEARNING | 1. The deep learning architecture is flexible to be adapted to new problems in the future. 2. The same neural network based approach can be applied to many different applications and data types. 3. Massive parallel computations can be performed using GPUs and are scalable for large volumes of data. Moreover it delivers better performance results when amount of data are huge. | 1. It requires very large amount of data in order to perform better than other techniques. 2. It is extremely expensive to train due to complex data models. Moreover deep learning requires expensive GPUs and hundreds of machines. This increases cost to the users.   It is not easy to comprehend output based on mere learning and requires classifiers to do so. Convolutional neural network based algorithms perform such tasks. |

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| Airline Flight  Delay Prediction  Using Machine  Learning Models | H.Khasar A.sheikholesa  lime | MACHINE LEARNING | 1.No human intervention needed (automation)  2.Easily identifies trends and patterns  3. Continuous Improvement  4. Handling multi-dimensional and multi-variety data | 1. Data Acquisition  2. Time and Resources  3. Interpretation of Results  4. High error-susceptibility |
| FLIGHT  DELAY  PREDICTION  USING THE  DATA  MINING | Adrian, A. A.  Simmons | DATA MINING | 1. It helps gather reliable information 2. Helps businesses make operational adjustment 3. Helps to make informed decision 4. It helps detect risks and fraud | 1 . Data Mining tools are complex and require training to us  2. Data mining techniques are not infallible  3. Rising privacy concern  4. Data mining requires large database |
| FLIGHT  DELAY  PREDICTION  USING THE  AVIATION | RAHUL  GARG,SOH  AM  GOSAVI, | BIG DATA | Reveals that big data analytics has helped businesses to reduce their expenses  significantly. 66.7% | The lack of big data experts and data scientists has been the |
| OF BIG  DATA | TEJAS  CHOULWA  R |  | of survey  respondents from New Vantage claimed that they have started using big data to reduce expenses.  Furthermore, 59.4% of survey respondents from Syncsort claimed that big data tools helped them reduce costs and increase operational efficiency. | biggest challenge in this field for the past three years. Currently, many IT professionals don’t know how to carry out big data analytics as it requires a different skill set. Thus, finding data scientists who are also experts in big data can be challenging. |