View Reviews

Paper ID
414

Paper Title
Improving Passenger Experience: Predicting Airline Delays Through Machine Learning

Track Name
Track 3: Artificial Intelligence (AI), IOT and Computer Vision Enabled Technologies

Reviewer #2

Questions

2. Does the paper describe an original work?
Yes

3. Is the paper technically sound ?
Yes

4. In your opinion, does the paper show technical novelty ?
Yes

5. Are the title and abstract satisfactory ?
Yes

6. Is paper organised as per IEEE standard format and style?
No

7. Are all the tables, figures and references properly cited in the text?
Yes

8. Strength and Weakness of the Paper
• Adequate title.
• Literature review is appropriate as per title.
• Outcomes and analysis of article is up to the mark.
• Formatting and editing/ spacing need to be update.
• After certain revision accept it.

9. Contributions: What are the major issues addressed in the paper? Do you consider them important? Comment on the degree of novelty, creativity and technical depth in the paper.
• Adequate title.
• Literature review is appropriate as per title.
• Outcomes and analysis of article is up to the mark.
• Formatting and editing/ spacing need to be update.
• After certain revision accept it.

10. Your overall recommendation

Accept with minor revision

11. Overall evaluation and comments to authors

• Adequate title.

• Literature review is appropriate as per title.

• Outcomes and analysis of article is up to the mark.

• Formatting and editing/ spacing need to be update.

Files

414-review-627.docx (13 Kb, 10/1/2024, 1:40:58 PM)

Reviewer #3

Questions

2. Does the paper describe an original work?

Yes

3. Is the paper technically sound ?

Yes

4. In your opinion, does the paper show technical novelty ?

No

5. Are the title and abstract satisfactory ?

Yes

6. Is paper organised as per IEEE standard format and style?

Yes

7. Are all the tables, figures and references properly cited in the text?

Yes

8. Strength and Weakness of the Paper

Strengths:

The use of a large dataset of over 336,000 records lends credibility to the results.

SVM shows strong performance, achieving a 97% accuracy rate.

The paper thoroughly explores data preprocessing, which is critical to the success of machine learning models.

Good comparative analysis of different machine learning models.

Weaknesses:

Limited novelty as the machine learning models used (SVM, Random Forest, Decision Tree, etc.) are standard approaches.

The abstract and some sections of the paper are overly verbose and could be more concise.

The study lacks real-world implementation discussion, such as how these models could be used in airline operations.

Linear regression was used despite its known limitations in handling non-linear data, which could have been avoided.

9. Contributions: What are the major issues addressed in the paper? Do you consider them important? Comment on the degree of novelty, creativity and technical depth in the paper.

The paper addresses the challenge of airline delay prediction, an important issue for improving passenger experience and airline operations.

The key contribution is the successful application of machine learning, particularly SVM, which achieved a high accuracy rate for predicting delays.

The comparison between different models (SVM, Random Forest, Decision Tree, etc.) is valuable, though not novel in methodology.

10. Your overall recommendation

Accept with minor revision

11. Overall evaluation and comments to authors

The paper provides a solid application of machine learning models to predict flight delays, with SVM proving to be the most accurate. The methodology is clear, and the results are compelling, showing the real-world value of such a system for airlines. To improve the paper, the authors could delve deeper into the challenges of real-time prediction, explore the use of advanced techniques like deep learning, and consider expanding the discussion on integrating weather data. Overall, it's a strong contribution to the field of predictive analytics in aviation.

Files

414-review-1329.pdf (76 Kb, 10/26/2024, 10:22:49 PM)

Reviewer #4

Questions

2. Does the paper describe an original work?

No

3. Is the paper technically sound ?

Yes

4. In your opinion, does the paper show technical novelty ?

Yes

5. Are the title and abstract satisfactory ?

Yes

6. Is paper organised as per IEEE standard format and style?

Yes

7. Are all the tables, figures and references properly cited in the text?

No

8. Strength and Weakness of the Paper

The model's effectiveness in a real-time setting is not explored, even though real-time data integration could significantly enhance prediction accuracy.

9. Contributions: What are the major issues addressed in the paper? Do you consider them important? Comment on the degree of novelty, creativity and technical depth in the paper.

This study contributes a highly accurate model for predicting airline delays, with the potential to enhance operational planning for airlines and reduce the impact of delays on passengers.

10. Your overall recommendation

Accept with minor revision

11. Overall evaluation and comments to authors

The use of a scalable and accurate model like SVM positions this solution well for real-time application, which could be beneficial in reducing delays and improving overall passenger experience.