APPLICATION OF DATA SCIENCE IN AVIATION

by

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BSc Computer Science (Data Science)

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Abstract

In accordance with the Academic Regulations the thesis must contain an abstract preferably not exceeding 200 words, bound in to precede the thesis. The abstract should appear on its own, on a single page. The format should be the same as that of the main text. The abstract should provide a synopsis of the thesis and shall state clearly the nature and scope of the research undertaken and of the contribution made to the knowledge of the subject treated. There should be a brief statement of the method of investigation where appropriate, an outline of the major divisions or principal arguments of the work and a summary of any conclusions reached. The abstract must follow the Title Page.

Dedication

If a dedication is included then it should be immediately after the Abstract page.
I don’t what it is actually.

Acknowledgments

I wanna thanks all coffee and tea manufacturers and sellers that made the completion of this work possible.

Contents

Chapter 1

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1.1 Dissertation topics for data science applications in the aviation sector

1.1.1 Ideas so far:

- Predictive maintenance of aircraft engines using machine learning algorithms
- Analysis of aircraft safety data using data mining techniques
- Optimization of airline scheduling and routing using genetic algorithms
- Analysis of passenger sentiment using natural language processing techniques
- Clustering and segmentation of airline customers for targeted marketing campaigns
- Forecasting demand for air travel using machine learning models
- Analysis of aircraft safety data using data mining techniques
- Optimization of airport operations using simulation and optimization models
- Analysis of air traffic patterns and optimization of airspace management
- Analysis of flight crew performance data using statistical methods.

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