**Student Declaration of Authorship**

|  |  |
| --- | --- |
| **Course code and name:** | F21DL – Data Mining and Machine Learning |
| **Type of assessment:** | Group Assessment |
| **Coursework Title:** | Airline Survey Analysis |
| **Group Number:** | Dubai\_PG 2 Dubai\_PG |
| **Student Names and IDs:** | SYEDA DANISH MARIAM (H00473375)  ANUGRAHA KANJOOKARAN ANTOO (H00460688)  AJAY KUMAR PAIDIMARRI (H00467552)  HARIHARAKUMAR RATHINAR(H00463082)  FIYIFOLUWA SHEDRACH ONAFESO (H00466745) |

# Declaration of authorship. By signing this form:

* **I declare** that the work I have submitted for individual assessment OR the work I have contributed to a group assessment, is entirely my own. I have NOT taken the ideas, writings or inventions of another person and used these as if they were my own. My submission or my contribution to a group submission is expressed in my own words. Any uses made within this work of the ideas, writings or inventions of others, or of any existing sources of information (books, journals, websites, etc.) are properly acknowledged and listed in the references and/or acknowledgements section.
* I confirm that I have read, understood and followed the University’s Regulations on plagiarism as published on the [University’s website](https://www.hw.ac.uk/uk/students/studies/examinations/plagiarism.htm), and that I am aware of the penalties that I will face should I not adhere to the University Regulations.
* I confirm that I have read, understood and avoided the different types of plagiarism explained in the University guidance on [Academic Integrity and Plagiarism](https://heriotwatt.sharepoint.com/sites/skillshub/SitePages/Academic-Integrity-and-Plagiarism.aspx)

**Student Signature** *(type your names): SYEDA DANISH MARIAM*

*ANUGRAHA KANJOOKARAN ANTOO  
AJAY KUMAR PAIDIMARRI  
HARIHARAKUMAR RATHINAR  
FIYIFOLUWA ONAFESO SHEDRACH*

**Date**: *11/22/2024*

**Data Mining and Machine Learning** (Course Code: **F21DL**)

**Airline Survey Analysis**

**(Course Work – I)**

|  |  |
| --- | --- |
| **Presented By** | |
| Author and Student ID of Author with email IDs | **Syeda Mariam Danish (H00473375)**  **smd4000@hw.ac.uk**  **Anugraha Antoo Kanjookaran (H00460688)**  **ak3034@hw.ac.uk**  **Ajay Kumar Paidimarri (H00467552)**  [**ap2054@hw.ac.uk**](mailto:ap2054@hw.ac.uk)  **Hariharakumar Rathinar (H00463082)**  [**hr30000@hw.ac.uk**](mailto:hr30000@hw.ac.uk)  **Fiyifoluwa Shedrach Onafeso (H00466745)**  **Fso3000@hw.ac.uk** |
| Version | **v1.0** |
| Working Capacity | **Group** |
| Group Number allocated | **Dubai\_PG 2 Dubai\_PG** |
| Date of submission | **22nd of November 2024** |

**TABLE OF CONTENTS**

[Declaration of authorship. By signing this form: 1](#_Toc182157768)

[1. OVERVIEW 4](#_Toc182157769)

[2. Data Analysis and Exploration 4](#_Toc182157770)

[3. Clustering 4](#_Toc182157771)

[4. Baseline Training and Evaluation Experiments 4](#_Toc182157772)

[5. Neural Networks 4](#_Toc182157773)

[6. CONCLUSION 4](#_Toc182157774)

[7. APPENDIX – CREDENTIALS 4](#_Toc182157775)

# OVERVIEW

.

# Data Analysis and Exploration

# Clustering

# Baseline Training and Evaluation Experiments

# Neural Networks

# CONCLUSION

# APPENDIX – CREDENTIALS

* GITHUB Repository Link: <https://github.com/HWHospital2024/HW_Hospital_App>
* Dataset Source Details:
  + Airline Passenger Satisfaction Dataset: https://www.kaggle.com/datasets/teejmahal20/airline-passenger-satisfaction/data
    - True Source: https://www.kaggle.com/datasets/johndddddd/customer-satisfaction
    - License: unknown
    - File name: airline\_passenger\_satisfaction.csv
  + Airline Passenger Satisfaction: <https://www.kaggle.com/datasets/mysarahmadbhat/airline-passenger-satisfaction/data>
    - True Source: https://creativecommons.org/publicdomain/zero/1.0/
    - License: No Copyright
    - File Name: train.csv & test.scv
  + VGGFace2 Dataset: <https://www.kaggle.com/datasets/jonathanoheix/face-expression-recognition-dataset>
    - True Source: Unknown
    - License: Unknown
    - Folder name: "train" & "Validate" folders