

Technische Universiteit Delft  
Faculty of Electrical Engineering, Mathematics and Computer Science

## Netflix Challenge: Movie Rating Prediction

CSE-2525 Data Mining  
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# 1 Introduction

The report, entitled "Netflix Challenge: Movie Rating Prediction", is prepared as my Challenge report for the course CSE2525-Data Mining at the Technische Universiteit Delft. The purpose of this report is to develop a recommendation system for predicting movie ratings. The goal of the recommendation system is to achieve a minimal Root Mean Square Error (RMSE) on an unseen dataset.

Four CSV files are provided for training and testing, as described in Table 1-1. Four CSV files are provided for training and testing, as described in Table 1-1. Four CSV files are provided for training and testing, as described in Table 1-1. Four CSV files are provided for training and testing, as described in Table 1-1. Four CSV files are provided for training and testing, as described in Table 1-1.

Table 1-1. The Provided Data Sets

Dataset	Features	Mean	Std	Min & Max
users	gender	0.72	0.45	0.00 1.00
	age	30.64	12.90	1.00 56.00
	profession	8.15	6.33	0.00 20.00
movies	year	1985.81	16.91	1919.00 2000.00
	title	-	-	-
ratings	rating	3.58	1.12	1.00 5.00

In users - 'gender', '0' and '1' indicates female users and male users, respectively;  
In movies - 'year', only non-zero entries are considered.

## 1.1 Datasets

Some more text and a cross reference to Appendix A and remember that one can lie about statistics [liewithstat].

### 1.1.1 Sub-subsection

The wine becomes deeper in colour going from a light yellow to golden.

### 1.1.2 Another Sub-subsection

Some more text. As a demonstration of tables, Table 1-2 demonstrates how certain types of entries should appear in a table. Note that, in order to centre the numbers in the last column, three columns are given.

Table 1-2. A table of numbers

	<b>Integers</b>	<b>Boolean</b>	<b>Monetary</b>	<b>Text</b>	<b>Units (g/mL)</b>
Row 1	3	T	12.34	First class	0.1234
Row 2	9	F	5.67	Some more text	5.67
Row 3	23	F	890.12	Other text	89.01
Row 4	157	T	34.56	Even more text	23 456.7

## 1.2 Another Subsection

Some more text.

## 1.3 A Third Subsection

Some text and a reference to Appendix B which contains additional information related to this report.

# 2 Background

The background of the report. As another example, Table 2-1 displays another set of numbers, but are actually the same as Table 1-2.

Table 2-1. Another table of numbers

	<b>Integers</b>	<b>Boolean</b>	<b>Monetary</b>	<b>Text</b>	<b>Units (g/mL)</b>
Row 1	3	T	12.34	First class	0.1234
Row 2	9	F	5.67	Some more text	5.67
Row 3	23	F	890.12	Other text	89.01
Row 4	157	T	34.56	Even more text	23 456.7

# 3 The Engineering Problem

Some more text.

## 4 Requirements, Criteria, and Metrics

A list of the requirements, criteria and metrics that will be used in this report together with a discussion on any issues surrounding the selection of these.

This is an example of an inline equation: the formula  $\sum_{n=1}^{\infty} \frac{1}{n^2} = \frac{\pi^2}{6}$  is often taught in first year. The integral, however, is slightly less, as is shown by the display equation

$$\int_1^{\infty} \frac{1}{x^2} dx = 1.$$

This is of course centred.

## 5 Possible Solutions

Equations can be numbered, for example, it may be necessary to refer to

$$F = \frac{d}{dt}(m\mathbf{v}), \tag{1}$$

that is, Newton's second law, elsewhere in the document. Cut-and-paste this table if you require an equation elsewhere.

### 5.1 Solution 1

A description and discussion of solution 1 and a reference to equation (1).

### 5.2 Solution 2

A description and discussion of solution 2.

### 5.3 Solution 3

A description and discussion of solution 3 and so on.

## **6 Engineering Analysis**

The analysis of the solutions based on the requirements and criteria listed above based on the metrics listed in Section 4 on section 4



## **Conclusions**

From the analysis in the report body, it was concluded that...

## **Recommendations**

Based on the analysis and conclusions in this report, it is recommended that...

## References

## **Appendix A   Title of First Appendix**

Use the No Spacing style.

## **Appendix B   Another Appendix**

Again, use the no spacing style for appendices.