

**IS 597-MLC – Machine Learning Pipelines Using Cloud-Based Platforms**  
**Instructor: Kevin Trainor**  
**Assignment: Final Project Deliverables**  
**Course Component: Final Project**  
**Grading Rubric**

## Submission

### Timeliness (10 available points)

#### Requirements

Must be submitted by date and time indicated in the weekly schedule.

Percent Credit	Description
100	On Time
50	Up to 3 days late
0	More than 3 days late
0	Not submitted or submitted too late

### File Submitted (10 available points)

#### Requirements

Submit only 1 file.

File type must be .PDF.

File name must conform to all requirements stated in assignment instructions.

Percent Credit	Description
100	Meets all expectations.
50	Meets nearly all expectations.
0	Does not meet expectations.
0	Not submitted or submitted too late.

## Introduction

### Completeness (7 available points)

#### Requirements

Must include 2 to 3 research questions.

Must be at least 2 to 3 paragraphs in length.

Must include background information regarding the topic.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

### Technique (3 available points)

#### Requirements

Must be written in professional prose organized into paragraphs.

Writing must conform to professional standards for grammar, spelling, and choice-of-words.

Content must be formatted in a professional manner that facilitates easy reading.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

## Literature Review

### Completeness (7 available points)

#### Requirements

Must include at least 4 scientific articles.

Must include 3 to 4 sentences on each article.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

### Technique (3 available points)

#### Requirements

Must be written in professional prose organized into paragraphs.

Writing must conform to professional standards for grammar, spelling, and choice-of-words.

Content must be formatted in a professional manner that facilitates easy reading.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

## Data

### Completeness (7 available points)

#### Requirements

Must include detailed description of the data set including source of data set, size, total number of records, format, etc.

If your dataset does not include at least 30,000 rows, then you must include an account of your discussions with the instructors approving the number of rows.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

### Technique (3 available points)

#### Requirements

Must be written in professional prose organized into paragraphs.

Writing must conform to professional standards for grammar, spelling, and choice-of-words.

Content must be formatted in a professional manner that facilitates easy reading.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

## Methodology

### Completeness (7 available points)

#### Requirements

Must include a detailed explanation of data preprocessing including duplicate removal, transforming data, etc.

Must identify the machine learning algorithm used for training the model and the evaluation metrics used for assessing the model performance.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

### Technique (3 available points)

#### Requirements

Must be written in professional prose organized into paragraphs.

Writing must conform to professional standards for grammar, spelling, and choice-of-words.

Content must be formatted in a professional manner that facilitates easy reading.

Percent Credit	Description
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90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

## Results

### Completeness (7 available points)

#### Requirements

Must include detailed description of the test results for each model used in the study.

Must include at least one table or plot that illustrates the test results.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

### Technique (3 available points)

#### Requirements

Must be written in professional prose organized into paragraphs.

Writing must conform to professional standards for grammar, spelling, and choice-of-words.

Content must be formatted in a professional manner that facilitates easy reading.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

## Discussion & Conclusion

### Completeness (7 available points)

#### Requirements

Must include at least one paragraph that discusses the model, its performance, and its implications for the research question(s) identified in the study.

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100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

### Technique (3 available points)

#### Requirements

Must be written in professional prose organized into paragraphs.

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Content must be formatted in a professional manner that facilitates easy reading.

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90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

## GitHub Repository

### Completeness (7 available points)

#### Requirements

The report must provide a GitHub URL that may be accessed by the grader.

The GitHub repository must include the data set and all code used in the study. The repository should also include a main Jupyter notebook that explains the steps that are required to reproduce your work.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

### Technique (3 available points)

#### Requirements

The code and the data set must run as expected when loaded to AWS by the grader.

Code must follow best practices as demonstrated in lectures, tutorials, and code solutions during the course.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.



## References

### Completeness (7 available points)

#### Requirements

Provides a citation for any article mentioned in the report including those mentioned in the Literature Review section, Methodology Section, etc.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

### Technique (3 available points)

#### Requirements

Must conform to a standard citation style such as APA, MLA, Chicago, etc..

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

**Total Available Points = 100**