CSC 177 Data Warehousing and Data Mining (Spring 2019)

Format Requirements for Final Project Report

Your report will be graded based on novelty, clarity, and the significance of the results. In short, it will be evaluated as though it is being refereed for presentation at a conference. You are encouraged to look at papers published at the major international conferences on data science (e.g., ICDE, KDD, SIGSPATIAL, ICDM, ICML) as a model for your paper.

1. Formatting

Go to Canvas and download the provided IEEE conference paper template. Use the template to formatting everything. The following is a formatting table for your quick reference. **Make sure your report (two-column format; single space for line spacing) is completely consistent with the provided template.** Number all tables, figures. Include a caption for each table or figure.

Font Size	**Appearance (in Time New Roman or Times)**		
	Regular	**Bold**	**Italic**
8	table caption (in Small Caps), figure caption, reference item		reference item (partial)
9	author email address (in Courier), cell in a table	abstract body	abstract heading (also in Bold)
10	level-1 heading (in Small Caps), paragraph		level-2 heading, level-3 heading, author affiliation
11	author name		
24	title		

2. Length

Your paper should be at least three page long (with all visuals).

3. A Suggested Outline:

Abstract. One paragraph that contains the following:

- **Motivation (1-2 sentences):** *Why the problem matters*?
- **Problem statement (1-2 sentences):** *What problem are you trying to solve?*
- **Approach:** *How did you solve the problem?*
- **Results:** *How did your solution(s) outperform the baseline approach?*

1. Introduction

- Briefly describe the problem you are addressing. *What is the problem? Why is it important?*
- Provide an overview of your approach. *What is your approach?*
- List your contributions. A bulleted list is fine.
- Show the organization of the rest of the paper.

2. Problem Formulation

Precisely define the problem you are addressing (i.e. formally specify the inputs and outputs).

3. System/Algorithm Design

3.1 System Architecture.

Provide reader a high-level idea about your whole design/system. *How all modules in your design interact with each other?*

3.2 Module 1

3.2.1 Algorithm Description (Algorithm A for Module 1)

Describe the algorithm. A psuedocode description might be helpful. Trace through a concrete example, showing how your algorithm processes this example. An intuitively meaningful example is much better than one with only meaningless symbols. People love visuals! Use figures if possible.

3.2.2 Algorithm Description (Algorithm B for Module 1)

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3.3 Module 2

3.3.1 Algorithm Description (Algorithm A for Module 2)

…

3.3.2 Algorithm Description (Algorithm B for Module 2)

….

4. Experimental Evaluation

4.1 Methodology

- *What was data used? How you split data to training and testing?*
- *What was the experimental setting?*
- *What metrics were used to compare different methods?*
- *What methods were implemented and compared?* Make sure you include the competing methods that address the same problem as comparison baseline.

4.2 Results

Present the quantitative results of your experiments. Figures such as charts or histograms are frequently better than tables. For each figure, explain the result. *What conclude we can draw from each figure?*

5. Related Work

Answer the following questions for each related work that addresses the same or a similar problem.

- *What is their problem and method?*
- *How is your problem and method different?*
- *Why is your problem and method better?*

How to cite papers?

Use the IEEE Citation Reference format to list your references sequentially in the References section. Citation of the source in the text should use the source number in a pair of brackets, such as [3]. Cite the full info about the paper:

- Author names

- Paper title
- Publication details
- Page numbers
- Year, etc

This is an example:

[1] Adomavicius G, Tuzhilin A., "Toward the Next Generation of Recommender Systems: A Survey of the State-of-the-Art and Possible Extensions", IEEE Transactions on Knowledge and Data Engineering, Vol. 17, No. 6. (June 2005), pp. 734-749.

In the text, use "[1]" to refer.

6. Conclusion

Briefly summarize the results and conclusions.

7. Work Division (Make sure you have this in your report)

A paragraph stating how the work is divided over all team members in your project.

8. Learning Experience (Make sure you have this in your report)

One or two paragraphs stating what you (and your partners) have learn from this project.
