# **Gazi University Engineering Faculty Computer Engineering Department**

### 2022-2023 Fall Term

## **Data Mining Course Term Project**

# Each student must select a Term Paper Dataset until December 5, 2022 17:00.

- Dataset must be select from UCI Machine Learning Repository and default task of dataset must be classification.
   (https://archive.ics.uci.edu/ml/datasets.php)
- Another student cannot choose the dataset chosen by a student. Therefore, you should choose four more alternative dataset and send these dataset via email.
- If two students choose the same dataset, the dataset will be assigned to the student who chose first. In such a case, dataset will be assign from alternatively selected datasets.
- If the student will has not chosen a dataset, the dataset will be assigned automatically.
- You should test selected dataset with different classification algorithm.
  You must select minimum 3 classification algorithm and compare results.
  You must evaluate the performance of your selected dataset and algorithms via Accuracy, Precision, Recall, and F1 Score metrics.
- The final report will be approximately 10 pages.
- You must use the paper template from the IEEE manuscript template (https://www.ieee.org/conferences/publishing/templates.html).
- Paper will provide a detailed analysis of the topic that will be both academically rigorous and managerially relevant.
- It will be graded on the basis of thoroughness, creativity, and relevance.
- Plagiarism will result in a grade of zero.
- The general outline of your paper should be like the descriptions on the next page.
- The deadline for submission of the assignment is December 29, 2022 17:00.

# **Term Paper General Outline**

#### 1. Abstract

- a. Summary of your project
  - i. Reasons for undertaking the work
  - ii. Methods used
  - iii. Findings and conclusion
- b. No longer than one page (250 words)

## 2. Introduction

- a. Explain the problem
- b. Outline logic of the paper
- c. Provide general conclusions

# 3. Purpose for paper

a. Why is this paper important to the discipline

### 4. Literature Review

- a. What theoretical perceptive and concepts were used in development of paper
- Analysis of past work and how they shed light on issue or problem.

## Research Question(s)

a. The key question this paper is going to address

# 6. Methodology

 If appropriate, describe the research methods which will be used to complete the paper

## 7. Findings

- a. Describe the findings
- b. Support them with evidence from literature or research
- c. Compare findings with theories form Literature Review section

### 8. Conclusions and Recommendations

- a. What conclusions can be drawn
- Relate to business, governments and non-governmental organizations as appropriate.