2023 SPRING PRESENTATION DESCRIPTION

Each presentation must consists of the following two parts.

Part 1 (25pts)

It is a **lecture type** 20 minutes long presentation (see description below).

Part 2 (5pts)

It is a short, 5 minutes presentation of a research paper, or an application (see description below)

Presentation General Format

First slide must contain: Presentation Title, Presentation TEAM NUMBER, team members names and student IDs, Professor name, course number and course name.

Second slide must contain ALL sources you used for the presentation, the book is included.

In the case of the book the reference you have to put are title of the chapter, sections and pages numbers. Third slide is an OVERVIEW of your presentation.

Remember to include a source of any picture, of any slides copied from a source, or any DIRECT citation on the bottom of each of your slides where it appears.

Presentation Part 1 main goal is to teach others the material. It is a detailed, lecture type presentation. It can be based on, or extending the content of the book, book slides my slides, or any lother sources.

Presenters have to put time and effort into understanding the material, present it slowly and be prepared to answer questions.

Presentation Part 2 is a presentation of a research paper, or a newest commercial application connected with the subjects covered in the Presentation Part 1.

The structure of the **Presentation Part 2** is as follows:

- 1. If you present a paper you must include on your first slides authors names, title and place (journal, conference), where it was published and the date of the publication, or any other source of the paper you present. You must ATTACH the .pdf copy of the paper with your Presentation submission.
- 2. If you present a commercial application you must find relevant data about the application and include it as .pdf with your Presentation submission.

3. Each group member should present some part of the group work. The format of how you decide to do it is left to you as a group.

The TEAM and presenters will be graded for the presentation skills, the content, organization, clarity, and amount of work put into research and preparation form and delivery.

Each member of the team has to present his/hers own well defined part and will be graded individually on this part as well as a part of overall evaluation of the group.

Remember that "I don't understand" is also an answer, but don't over-use it! The better answer is: "the book, paper is not very clear, I think that it is ..., or I understood it as ...".

Students **should** attend all of the presentations to learn the material and to learn from other teams presentations delivery.

We will take attendance.

Presentations will be evaluated independently by Professor and TA present in class during presentations.

You will get instructions from TAs via Blackboard and email when and where to submit Presentation.

TEAM Leader has to email TEAM's Presentation and Research Paper copy to Professor on the day of the Presentation - before the class. Late submission will result in some points deduction.

PRESENTATION SUBJECTS

Students can find their own subjects and are encouraged to do so.

Here are some possible subjects you can choose from. YOU CAN COMBINE THEM!

Data Preprocessing - methods and their applications

Classification and Classifiers: Model Evaluation and Selection - past, present and advances

Mining Association and Association Rules in Relational and Transactional databases - Principles and Techniques, Problems, Advances.

Descriptive and non Descriptive data Mining - an Overview and Advances.

Statistical Methods 1: Statistical Prediction, Prediction by Regression, other statistical methods.

Statistical Methods 2: Classification by Neural Networks- past, present and future.

Statistical Methods 3: Bayesian Classification.

Statistical Methods 4: Cluster Analysis. A Categorization of major Clustering methods.

Evolutionary Computing: Genetic algorithms as optimization, Genetic algorithms as classification. Other evolutionary computing methods.

NEW ADVANCES

For example you can cover subjects like these listed below.

Deep Learning: Principles and Applications.

Web Mining: an overview of methods and problems.

Text Mining: an overview of methods and problems.

 ${\bf Visualization}\,$ and DM techniques.

Natural Language Processing and DM techniques.

FIND YOUR OWN subject and discuss with your TEAM