IBMBB BioComputing -2 - 2023

Project Specification

The project is planned to provide you with an opportunity to have hands-on experience in working with data. This is a group project and each group may have a maximum of 3 members. The groups are noted below. The project counts for 20% of your final grade.

The project entails **a supervised learning task related to biology/medicine.**

Groups

Index No	Group
IBMBB/BI/2023/001	1
IBMBB/BI/2023/002	1
IBMBB/BI/2023/003	1
IBMBB/BI/2023/006	1
IBMBB/BI/2023/007	2
IBMBB/BI/2023/008	2
IBMBB/BI/2023/009	2
IBMBB/BI/2023/010	2
IBMBB/BI/2023/011	3
IBMBB/BI/2023/012	3
IBMBB/BI/2023/013	3
IBMBB/BI/2023/014	3
IBMBB/BI/2023/015	4
IBMBB/BI/2023/016	4
IBMBB/BI/2023/017	4
IBMBB/BI/2023/018	4
IBMBB/BI/2023/019	5
IBMBB/BI/2023/020	5
IBMBB/BI/2023/021	5
IBMBB/BI/2023/022	5
IBMBB/BI/2023/023	6
IBMBB/BI/2023/024	6
IBMBB/BI/2023/025	6
IBMBB/BI/2023/026	6
IBMBB/BI/2023/027	7
IBMBB/BI/2023/028	7
IBMBB/BI/2023/029	7
IBMBB/BI/2023/030	7

Dataset

You are allowed to use any dataset that you prefer, including your own data.
A recommended source of datasets is the UCI repository.

Milestones

Milestone	Group/Individual	Marks	Due in
Rapid proposal presentation	Group	5	Week 6
Proposal	Group	30	Week8
Follow up discussion (counted for participation)	Group	0	Week 10
Poster Presentation and Contribution Report	Group	65	Week 13
Poster/Abstract submitted for publication*	Group	5	Week 15

Table 1: Milestones of the project
*Counts for bonus marks

Rapid proposal presentation

A 5 min presentation followed by 5 min QandA. You will mainly answer the questions below.

1. Who are the group members
2. Details/Background of the problem you will be working on, Where the data come from?
3. What is the modelling problem you seek to explore? Can you define the input and output of the model?

Proposal

Each group should submit a proposal of maximum of 2 pages, outlining the plan for modelling and evaluations.

Follow up discussion (counted for participation)

Each group will present their intermediate results in a 5 minute presentation (maximum 4 slides). They must answer the questions below.

1. Who are you and what problem are you trying to solve?
2. Provide details of approaches taken by each team member.
3. Intermediate results for each team member.
4. What is planned next?

Poster Presentation and Contribution Report

Poster Presentation:

In this you will present a summary of all your work as a group. The objective of a poster presentation is to enable someone outside your group to understand your work without you presenting it. Read more about poster presentations here.

Your poster must include:

1. Title, with names and affiliations
2. Abstract: A paragraph or two summarizing your work.
3. Introduction: Provide a background to your problem and why it is significant
4. Problem: Provide details about the problem: How data look like, what exactly is the problem solved?
5. Methodology: Provide details of the approaches you have taken to infer from the data.
6. Results: Present key results of the work
7. Discussion and conclusions: What are the implications? What conclusions you can make based on your findings. Any limitations of your work, what would be possible future work?
8. References: Provide the list of references

Contribution Report

An individual report (maximum 6 pages), outlining your individual contributions to the project. Use this to present all details of the analysis you have done and any other contributions you made for the project.

Poster submitted for publication

This is optional and will carry bonus marks for the project.