Department of Computer Science and Information Technology

Topics in Data Science

Assignment 1 (contributes 20% of CASS)

Due date: 3 August 2025 at 21:00

Submission portal: Moodle

This assignment is expected to be done in groups of 2 (except 1 team that will be 3)

Part 1

Using an industry or human system of your choice conduct the following:

1.1 Discuss the technologies in place or technologies that can be used.   [6]

1.2 Propose and discuss innovative AI integration that can enhance the use of the technology identified above.   [8]

1.3 Evaluate the ethics issues that arise by the AI integration in the area selected above.
                                                                                    [8]

1.4 Explain how you would address the ethical issue identified above.   [8]

   (Avoid submitting work generated by AI, this will be checked).

Part 2

Watch the video on this link YouTube as a starting point.

2.1 Develop and implement AI python framework to demonstrate AI integration.
                                                                                    [20]

2.2 Discuss the ethics issues that arise from your application, and suggest how you would mitigate them.   [10]