**CS401: Artificial Intelligence**

**Project Description**

Total Marks: 10

As discussed during lectures, typical AI project consists of the following 6 steps. In this project, you are required to document and apply these steps on a challenging problem. The project is quite open and it’s your imagination how you efficiently able to identify problem, gather information about it and propose a solution with effective implementation. Advantage will be giving to those who use local data

**1. Project Motivation**

* What is the problem you want to solve?
* Which strategic goal is it linked to?

**2. Problem Definition**

* What specific **output** do you want to predict?
* What **input** data do you have for the algorithm?
* What are the most **relevant factors** for predicting your specific output?

**3.Relevant Method/Model**

* What specific **output** do you want to predict?
* What **input** data do you have for the algorithm?

**4. Performance Measurement**

* How will you measure the **accuracy** of the predictions?
* What is the minimum level of accuracy you expect?

**5. Risks and Dependencies**

* List any risks that may apply to this project and how those risks would be mitigated if encountered
* List any constraints that apply to this project.

**6. Run performance checks**

* **Classification Accuracy:** number of correct predictions vs number of predictions made
* **Confusion Matrix:**  Similar to Accuracy, but more visual.

All Students are required to write a 4-6 pages report about the project in your own words describing each step.

**Standard Outline and Format for a Paper (IEEE)**

* **Content**
* **Abstract** 1: The problem

2: How the study addresses this problem

3: Key results

* **Introduction**
* **Background or Literature Review**
* **Methods and Materials**
* **Data and Results**
* **Conclusion**

1: Summary of the findings

2: Limitations of the study

* **References**

Using (Times new Roman) Font size=12, Line Spacing of 1.15, Alignment=Justify and Margin of 1”. Figures with Captions.