



AI6125: MULTI-AGENT SYSTEM

Assignment #1

Multi-Agent System Literature Review

**SCHOOL OF COMPUTER SCIENCE AND ENGINEERING
NANYANG TECHNOLOGICAL UNIVERSITY**

In this assignment, you will need to write up a comprehensive literature review in the area of multi-agent system that has to include the following components:

- First, you will need to start the literature review with **a detailed description** of an innovative application of multi-agent system. This application can be from real life, or a research paper, or even from your imagined scenario where you think multi-agent system can be applied.
- Then identify **a key research problem** in this application and **the challenges of solving this problem**. This research problem needs to be a valid problem that exists in the literature of multi-agent system.
- After that, you will need to survey the **methodologies** that try to address this problem in the past 5 years, as well as the **advantages and disadvantages** of these methodologies.
- Finally, you will need to discuss some potential ideas of **a new approach** for addressing the research problem and clearly state **why** you think these ideas would work.

Submission Instructions

The assignment should be written in the format of single column and single line spacing with the font size of 11. The main content should be no more than 5 pages, plus one page for references.

The assignment should be uploaded to the course website at NTULearn system. The link is provided below the assignment on the Assignment page. Please strictly follow the file name convention: assignment1-your name-student id.pdf

Assessment Weightage

- Description of the application (20%)
- Research problem and challenges (20%)
- Methodologies in the literature (30%)
- Your own ideas (20%)
- References (10%)

Deadline

The due date of the assignment is: **Sunday, February 20, 2022, 11:59:59PM**

Note that **FIVE (5)** marks will be deducted for the delay submission of each calendar day.