



## Machine Intelligence Research Assignment

Learning objectives:

1. Students should learn how to read a research paper.
2. Students should learn the state-of-the art applications of the concepts and algorithms studied in the course.
3. Students should learn how to analyze and review a research paper.

Write a review about a research paper for an application in machine intelligence.

The research paper should belong to one of the following topics studied in the machine intelligence course.

- Search Algorithms (Uninformed, Informed)
- Local Search
- Games
- Constraint Satisfaction problems
- Markov Decision Process
- Reinforcement Learning
- Bayesian Networks
- Bayesian Decision Networks

The paper should be a **recent paper published in the last three years (2020-2022)**. It can be a conference or a journal paper. **You should choose a good conference (highly ranked)**, for example: published in IEEE, Springer, or a good journal (IEEE, Springer, Elsevier).

Examples of top artificial intelligence conferences:

- AAAI
- ICML
- NIPS
- SIGKDD
- IJCAI

- ICDM
- SIAM International Conference on Data Mining (SDM)

The review should be **at most three pages**, summarizing the paper. Your review should include the following items:

- The paper overview (the main topic of the paper).
- The problem that the paper solves.
- The relevant topic of the machine intelligence.
- The basic directions of the related work so far in literature.
- The paper scientific contribution (what is the added value of the paper?).
- Your evaluation to the paper (what is your opinion about this paper, do you have any comments/suggestions/generalization to other problems.)(Please be objective).

**Notes:**

- **Do not copy-paste from the paper or from the literature or from anywhere. Write in your own words. Copy-paste from any source will result in ZERO grade.**
- **Review your writing for spelling and grammar before delivering the review report.**
- You should work on this assignment individually.
- **The best paper review for each topic will be presented by the student who did it in the last week lecture of the semester.**

**Deadline:**

- All students should fill a spreadsheet of their relevant topics on Saturday **17<sup>th</sup> December 11:59 pm and send it to the teaching assistants and me.**
- Deadline for submitting the assignment: **Thursday, 29<sup>th</sup> December 2022 11:59 pm.**