



# PRACTICAL ASSIGNMENT MULTIAGENTS

Authors: Name Surname, ...,

## 1. Introduction

Describe the motivation of these types of algorithms and any relevant information of your approach concerning the literature in multiagents optimization or optimal search. The report should be submitted in pdf and it can be created with any text processor (word, latex). **Maximum 2 pages without counting the images and references.**

**Contribution:** Describe in one sentence the contribution of each of the members of the team to the assignment.

## 2. Multiagent greedy search without communication

Describe the decisions made to program the algorithm and explain the behavior of the agents regarding your implementation.

## 3. Multiagent greedy search with a common belief

Describe the decisions made to program the algorithm and compare it with the no-communication version of the algorithm.

## 4. Multiagent search with N-step piece-wise continuous optimization

Describe the decisions made to program the algorithm and discuss the complexity versus the efficiency against the greedy version of the search.

## 5. Heterogeneous sensors

Describe how you can model agents with different sensors and how the utility function will change and the rest of the algorithm.

## 6. References

We evaluate positively that you link your descriptions with other works in the literature.

*Important: Do not paste code in the report. You can add figures to support your description.*

**Appendix.** Evaluation for each exercise:

Complete	Complete-	Incomplete	Incomplete-
2 points	1 point	0.5 points	0 points
No errors are found and the agent does what it is supposed to do.	Minor errors are found or the code is correct but behavior is not correct.	An important part of the task is not completed or one part does not make sense.	The task was not done or its implementation is extremely poor.

<b>Clarity of the code</b>	The code is readable, by the code itself or by comments added.	The code is not readable or there are no comments explaining it.
<b>Report: coherence of the argumentation</b>	The explanation of the decisions of each part is in line with the code implemented	There is no proper explanation or the discussion is meaningless: - The explanation has to be scientifically sound - University level The code could be perfect but a naive explanation will not get the best grade.
	1 point	0 points