

# CS7IS2: Artificial Intelligence Project

Due date: Sunday March 29<sup>th</sup> 23:59.

No late submissions will be accepted, as projects will be presented in the weeks 11 and 12 of the term

In this assignment, you are required to produce a report where you analyse and evaluate state-of-the-art AI algorithms to solve a problem of your choice. This assignment is worth total of **50% of your overall CS7IS2 mark**.

The files provided contain the requirements specification and guidelines (a zip folder containing a .tex source and a .doc file) for writing your report. In addition, they provide also the format for the report.

You will work in groups of 4 people and you can select your own group members. I would recommend forming the groups around the common interest area rather than just working with friends. I have provided a google doc which all of you should be able to edit, to help you search for partners or fill in empty spots in already formed groups

[https://docs.google.com/document/d/1TeXzrcYgBe9oqsuTxwz0lfoww\\_9FE4PHvTQbbg-rlTQ/edit?usp=sharing](https://docs.google.com/document/d/1TeXzrcYgBe9oqsuTxwz0lfoww_9FE4PHvTQbbg-rlTQ/edit?usp=sharing)

A report must be between 8 and 10 pages in the format provided (both .doc and .tex templates are provided) Shorter or longer reports will be penalized.

## Registering groups and repository link

- You need to **register your group members** by sending me an email with the name of participants using the subject line "CS7IS2 Group members". The email has to be sent by **Sunday 23<sup>rd</sup> of February 2019**. This deadline is mandatory, failure will result in a penalty of 10%.
- Your registration email also needs to contain the **link to a repository** where you will **keep all of your code and report text produced for this project**. The repository should not contain just final submission, but should start with an empty template and show the history of ALL of the contributions, both in terms of text and code. You can also maintain a todo file, progress, meeting minutes etc in the repository. I will not inspect this in detail, but will use it to verify that all team members have more or less equally contributed to the project. If you are using a public repository, please include only the link to it in the email. If the repository is private, you will need to add me as a member to be able to see your contributions. My github account is duspari, and bitbucket one ivanad. If you are using college-hosted gitlab.scss.tcd.ie, my college username is duspari.

## Presentation and sharing your report with the class

Each group will give a 4-slide (max 5-minute) presentation on their project to the class in week 11 and 12 of the semester. Presentation will not be marked, but failure to present will result in 10% penalty. All project reports will be shared with the whole class so that everyone benefits from the

research done by each other. More details about the presentation and how to share the reports will follow closer to the time.

### **Submission instructions – please read fully and carefully.**

Submissions are via blackboard, and due by Sunday March 29<sup>th</sup> 23:59. Submissions will be checked for plagiarism using Turnitin.

Submit **a single zip file** containing only the **pdf of the final report** and the **readme.txt file**, named NAME\_SURNAME\_STUDENTID\_assignment2.zip.

Readme.txt file should contain the following information:

- Link to repository with all the code and iterations of the document
- Group members list and summary of contributions of each member in the team

**All members of the group need to submit the same report in their blackboard profiles.**

### **Some helpful links to get you started**

AI-related conferences

- IJCAI International Joint Conferences on Artificial Intelligence Organization
- ECAI European Conference on Artificial Intelligence
- AAAI - Conference on Artificial Intelligence
- AAMAS - International Conference on Autonomous Agents and Multiagent Systems
- IJCNN - International Joint Conference on Neural Networks
- GCAI - Global Conference on Artificial Intelligence
- IJCCI - International Joint Conference on Computational Intelligence
- AAAI/ACM - Conference on AI, Ethics, and Society
- IJCAR - International Joint Conference on Automated Reasoning
- FLoC - Federated Logic Conference
- KR - International Conference on Principles of Knowledge Representation and Reasoning
- NIPS Annual Conference on Neural Information Processing Systems
- ICML International Conference on Machine Learning
- ECML PKDD European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases
- CIKM Conference on Information and Knowledge Management
- SIGIR Association for Computing Machinery's Special Interest Group on Information Retrieval
- RecSys ACM Recommender Systems Conference
- ACL Association for Computational Linguistics
- NAACL HLT North American Chapter of the Association for Computational Linguistics
- COLING International Conference on Computational Linguistics

Journals

- AI Magazine
- AI Communications
- Journal of Artificial Intelligence Research
- IEEE Transactions on Computational Intelligence and AI in Games
- IEEE Transactions on Pattern Analysis and Machine Intelligence

- IEEE Intelligent Systems
- Computational Intelligence

In addition, every chapter of the book "Artificial Intelligence: a Modern Approach" ends with a "Bibliographical and Historical Notes" section which provides further reading and lists the relevant conferences/journals for the topic covered in the chapter.