

## **Lab9-12 – Research report**

Deadline: Week 12

Grading: 20% from the final grade

First version for the research report/ article

Requirements:

**1** A single document (pdf/doc) containing the original article / research report

The structure of the document (should include at least the following elements):

**Abstract** – Why should anybody read the paper?

Includes: a brief description of the approached problem, what are the original contributions in the paper, what are the results..

**Classification** – classify the approached topic according to ACM and AMS classification systems.

**Introduction**- Why is the approached problem relevant?

Include: background, clear formulation, importance for the approached problem, related work, identify unresolved issues in the domain that are approached in this paper, highlights the original part, research questions that are answered in the paper, description of the novelty introduced by the paper, short description of the structure of the paper.

**Introduce original approach:** – How the approached problem is solved?

Include: Describe the approach, mathematic/formal model for the proposed approach, description of the proposed algorithms/methods/models, highlight the part that is original when compared with the state of the art in the scientific literature.

**Experiment validation** – What are the results that support the validity of the approach?

Include: experimental evaluation on a small dataset in order to illustrate the proposed approach, describe the experiment to be performed on real, large scale

dataset, describe the how the data was acquired/generated, present the results of the experiments.

**Conclusions and future work** – How do we interpret the obtained results?

Include: interpretation/validation of the results, comparison with existing approaches, response to the proposed research questions in accordance with the experimental part, what are the conclusions that are sustained by the results, validity of the experiments, future work.

**Bibliography:** article/book bibliography references in appropriate format and detail.

**2** The source code and the document (research report) should be placed in a source code repository (ex. git) that offers the possibility to see all the changes and progress made to the code/document.

To be included in the submission: the repo history that demonstrates that you have consistently worked on the requirements in this lab.

Each week of delay is penalized with one point from the grade. After 2 weeks from the deadline, the laboratory is no longer graded (a grade of 1 is received for this lab assignment, the final grade is calculated)