

Unsupervised Machine Learning and Data Mining (DS 5230)
Spring 2022 – Project Reports – 100 points
Due: Wednesday, May 4, 2022 at 11:59 PM Eastern
(There are no late days for this assignment.)

Your project reports upload one zip file to Canvas. Your zip file should be named:

<Lastname><Firstname>ProjectReport.zip

The zip file should contain

- (1) your report in PDF and be named <Lastname><Firstname>ProjectReport.pdf, and
- (2) your source code.

I do **NOT** need the data that you used.

To make the grading process easier, I would like each student to upload his/her report -- even if you are part of a team.

You have **a maximum of 6 pages** for your project report (including references and appendices). I will **NOT** read beyond 6 pages. Follow the ACM formatting guidelines available at

<https://www.acm.org/publications/proceedings-template>

Your report should include the following:

- Title and author(s)
- Introduction Section
 - Introduce the topic and define (informally at this stage) the problem.
 - Motivation: Emphasize why is the topic important.
 - List contributions of the report.
- Related Work Section
 - Relate to current knowledge: what's been done.
 - Indicate the gap: what needs to be done?
- Background Information Section
 - Explain any necessary background material.
- Proposed Approach Section
 - Introduce formal definitions: terminology and the problem being addressed.
 - Introduce your approach: algorithm/representation/data structure etc.
- Experiments Section

- Describe experimental set-up, explain what the experiments will show.
 - Describe the datasets.
 - Summarize results with figures/tables.
 - Discuss results.
 - Explain conflicting results, unexpected findings and discrepancies with other research.
- Conclusions and Future Work Section
 - Summarize the work.
 - State limitations of the study.
 - State importance of findings.
 - Announce directions for further research.
- References

For guidance on writing the final report, see Eamonn Keogh's KDD'09 Tutorial on "How to do good research, get it published in SIGKDD and get it cited!" available at

http://www.cs.ucr.edu/~eamonn/Keogh_SIGKDD09_tutorial.pdf