

CA5314 – Laboratory Mini Project Guidelines

The Laboratory mini project is an opportunity for you to explore an interesting machine learning problem of your choice in the context of a real-world data set.

- Projects can be done individually, or in teams of two students. For a two-person group, group members are responsible for dividing up the work equally and making sure that each member contributes.

Your mini project will be worth 20% of your final Laboratory grade, and will have 3 deliverables:

- **Proposal:** (Dec. 28th) 1 page (25%)
- **Poster Presentation and Demonstration:** (50%)
- **Final Report:** 8 pages (25%) The page limits are strict!

Each deliverable of your project will be evaluated based on several factors:

- The novelty of the project ideas and applications. The groups are encouraged to come up with original ideas and novel applications for the projects. A project with new ideas on ML or new, interesting applications of existing.
- A project that produces a more intelligent system by combining several ML techniques together, or a project that involves well-designed experiments and thorough analysis of the experimental results, or a project that nicely incorporates various real-world applications, are scored higher.
- The writing style and the clarity of the final report.

Project Proposal (Due Date: Wednesday, December 28th)

You are encouraged to use data sets, because we know that they have been successfully used for machine learning in the past. If you prefer to use a different data set, we will consider your proposal. While we strongly encourage you to consider using Latex to write your proposals as this will make including mathematical equations easier, it is acceptable to use another program like Microsoft Word to write your proposal.

Page limit: Proposals should be one page maximum.

Include the following information:

- Project title
- Data set
- Project idea. This should be approximately two paragraphs.
- Software you will need to write.
- Teammate (if any) and work division. We expect projects done in a group to be more substantial than projects done individually.
- Experimental results of some kind are expected here.