

Assignment 2 – Paper (on Applied Machine Learning)

Due Friday March 17th @11:55pm

The second assignment is an extension of Assignment 1. You must write a paper formalizing the research you did during the previous assignment. You are also encouraged to extend the research you did in the previous assignment with the new techniques you have learned. I strongly recommend using the IEEE conference paper template available in [overleaf.com](https://www.overleaf.com/latex/templates/ieee-conference-template/grfzhnscsfqn)

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Overleaf is a free LaTeX editor frequently used for writing scientific papers. The paper should be at least 5 pages long including title, abstract, figures and citations. The paper can be written individually or in groups of two. The paper should resemble as much as possible a scientific paper. As an example of actual scientific papers I'm uploading some IEEE papers that I have written in collaboration with former or current UPEI students.

The paper should include:

1. Abstract
2. Introduction describing the motivation to choose the dataset and the goals of your research.
3. Background
 - a. Describe the dataset.
 - b. Briefly describe the machine learning techniques used.
4. Results and analysis (you don't need to do all of the following)
 - a. Present tables and plots for parameter tuning, dimension reductions or feature selection.
 - b. Present tables and plots to compare the different models.
 - c. Present tables and plots to analyze overfitting/underfitting.
 - d. Present tables and plots to show final results.
5. Conclusions and discussion
 - a. Provide insights, discuss and summarize your results, mention future research (what else could you have done).

Submission Guidelines:

The project can be done individually or in groups of two. Submit as a single pdf file through the Moodle link provided. Use the following naming format for your pdf file:

lastnameStudent1-lastnameStudent2-as2.pdf