

ME8813ML Machine Learning Fundamental for ME
Project Report 2
(Due 4/29/2022 – 11:55pm)
(This is an individual assignment)

*The written **report/paper (.docx or .pdf)**, **source code (.py or .ipynb)**, and **presentation slides (.pptx)** should be submitted **electronically** onto Canvas before the due time. It is weighted as 35% of the final grade for the course. Late submission will NOT be accepted, except for the grace period only given to students who enrolled in Section Q.*

The deliverable for this option includes the *written report, developed source code, and presentation slides.*

1. Written Report:

The project written report should have the length of 8~15 pages (not including references) with the *single-column double-space* format and 12-point font. It should contain the following contents:

- 1) Cover page: Provide a meaningful project title
- 2) Introduction: What are the issues you studied? Why are such issues important? What are the existing approaches that people have developed/used to solve these issues (providing necessary references such as the published conference and journal papers)? What is the approach you took to solve the issues? What was the objective you intended to achieve?
- 3) Methodology: Describe the details of your approach.
- 4) Results: Describe the results you achieve and provide discussions on these results.
- 5) Summary and Future Work: Summarize what you have accomplished and what you have found. Discuss the limitations of your approach and the possible future improvement if more time is available.
- 6) References

2. Presentation:

The presentation slides should contain the similar contents as in the report. The submitted MS Powerpoint presentation slides should contain your **voice recording** so that the slides can be replayed in lieu of live presentation.

3. Source code:

The developed source code should be submitted as a zipped package.

Evaluation Criteria

The project will be graded based on the criteria that if the assumptions, methodology, and results are **sound**, **reasonable**, and **accurate**, if the report is **organized**, and if the English writing is **error-free**.

The ultimate evaluation criterion is whether the result and final report are publishable at an engineering conference. An excellent project report should include a new approach to solve the problem or new findings, with comprehensive literature review as references to show the novelty of the proposed approach.

Note that equations are part of sentences and should be edited with equation editors with numbers. All figures and tables should have numbered captions and referred to in the text body.