PHASE 3

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Instructor: Dr. Wei Ding

The Weightage for term project is as follows:
phase 1 would be 20%
Phase 2 would be 40%
Phase 3 would be 40%, it will include the in class presentation.

Data description:

Naval Air Training and Operating Procedures Standardization (NATOPS) Dataset.

- 6 of 24 body-hand gestures used when handling aircraft on the deck of an aircraft carrier
- Six classes of actions:

I have command; All clear; Not clear; Spread wings; Fold wings; and Lock wings.

In this phase, need to run some supervised classification algorithms on the data generated during phase2 from clustering and show the performance of their classification models. They are worth extra points if you apply multiple advanced methods and compare the difference between them.

NOTE: use .ipynb notebook to write your code and submission.

Tasks:

1. Data preprocessing:

Apply all the methods that apply like test train split, standardization etc. To preprocess

the data before training the model.

2. Design Algorithm

Apply any basic classification algorithms, like KNN or logistic regression. Or, it will be encouraged to see some deep learning methods, like MLP or Transformer. Show the training process in the

3. Model evaluation:

Evaluation metrics are quantitative measures that assess the performance of a machine learning model. Use these to describe the performance of your model.

Grading Criteria:

Full grade(40%): Design the model and implement the model, and describe the model evaluation.

Half grade(30%): Design the model and implement the model.

Submission:

Submit the notebook as .ipynb file and presentation.Upload these file on blackboard in the Phase3 section.
Deadline: 12th december 2023, 4:00PM

Presentation:

In class presentation displaying your results and methodology of all the three phases. At least one person from the group should bring their laptop to display the running the running version of the code.