Project Homework P4: Evaluations and Summary of Preliminary Results

Note: Please discuss with the instructor on item 1, 2, 3 before you conduct your evaluations. Section 5 of paper [1] can be used as an example for this homework.

1. Explain the goal of the experimental evaluation as a list of questions or hypothesis you would like test. For example, which two approaches are you comparing against each other? What aspects are you evaluating on your approach, e.g., classification performance such as precision and recall, or computational scalability, or interpretability of output patterns?

2. Describe the evaluation data and experimental configuration: data source with reference, data type, attribute information, and the number of (training and test) samples. Please list all the parameters you use in your approach.

3. Evaluation metric: the measure to evaluate the effectiveness of your solution, e.g., error, precision & recall, computational time, etc.

4. Preliminary results:

   (1) Visualization of output patterns or predictions. Each figure should have a clear caption, axis-label, and legend.

   (2) Report quantitative evaluation metric if applicable, e.g., precision, recall, F-score.

   (3) Conduct a case study to interpret your results. For example, interpret the patterns discovered by your algorithms.

   (4) Analyze experiment results to answer the questions or hypothesis you listed in 1. Based on the preliminary results, please briefly evaluate the effectiveness of proposed solution. If the results are below your expectation, please provide a plan to further refine your solution.

5. Summary and conclusion.