CSIT5210 Project Proposal Comment

Group No.: 2

Title: The COPOD Algorithm and its Applications under Multiple Scenarios

Type: Implementation

Comment (given by Raymond):

- 1. The members in this group plan to implement the method called COPOD (Copula-Based Outlier Detection) for the outlier detection problem. They planned to compare it under 3 scenarios (e.g., text scenarios, image scenarios and sound scenarios). It is good for the students to explore these 3 scenarios.
- 2. In the final report, it is better to include a case study to show how the outlier result generated by the proposed model is better than the one generated by the other baseline models.
- 3. If you use some codes written by others, please cite them in the report.
- 4. You could also implement the codes by yourself (even though there are some existing codes available). In this case, please do an experiment to compare the performance of your implementation with the performance of the existing implementation to see which one is better.
- 5. It is encouraged for this group to download the real datasets earlier (e.g., 30 public benchmark datasets) so that there are some real datasets to start with.
- 6. This project involves different models which require GPU computation, which is time-consuming. Please read the machine configuration of the existing papers (e.g., how many GPU's) to see whether you have enough powerful machines for your experiments. As you know, you will finish this project by mid-Nov.
- 7. Tuning parameters in the model is time-consuming. It is better to try the parameter tuning in order that you could finish the project by the deadline.