Rubrics for Term Project Presentation, Term Paper, and Tutorial

Team Presentation Rubric: 100%

1. Presentation Slide Format: 20%
   a. Font Size (at least 24 font size): 6%
   b. Data Size (should be at least 150MB; or need permission to get full credit): 5%
   c. Data Source: 4%
   d. H/W experimental Specifications: 5%
2. Originality: 20%
   a. How unique your idea (10%)
   b. and your deliverable with code (Azure ML link), data, PPT presentation slide in your github (10%)
3. The completeness and Relevance with the topic in the class: 45%
   a. Github that includes the presentation slide (and Azure ML link), data set: 8%
   b. Implementation in ElasticSearch : 10%
   c. At least 3 visual Charts in a dashboard: 15 %
   d. The chart need to show the tempo-spatial (time and location) analysis result: 12%
4. Communicate with the instructor about the topic to get approval to start the topic: 15%

Extra Credit: Additionally, if you add Azure ML result, you get extra 20% based on the following scores:

c.2. Adopt at least two ML algorithms to build models in Azure ML (ES as well): 4%

d.2 Completeness of Modeling, Training, Testing, Evaluation with Cross Validation: 4%

e.2 Calculate Accuracy (RMSE or Recall/Precision/AUR) and how accurate the best model is: 4%

f. 2. List which columns mostly affect the accuracy: you can use the module "Permutation Feature Importance" in Azure ML: 4%

g.2 It requires **table**(s) that compare the result of the models (4%).

NOTE:

1. **Peer Evaluation (Optional)**: You have to email to the instructor the peer evaluation about your team members for the term project and the presentation. It should be composed of:

Section #, Group name, Your Name, Team Member Name, Team Member's role, Team Members' Scores out of 100%, The reason you evaluate the member(s) with the score(s).

If you don't email me peer evaluation, I assume, all of you contribute the work fairly well.

For example, your team score is 95% and your peer evaluation by your team members are 100%, your score is 95 (= 95 x 100%)

2. **Plagiarism**: If you make a copy of others, it should violate the academic integrity so that you should get 0 in the term project or F in the course in the worst case.

Term Paper Rubric: 100%

It should be almost same as the team presentation. But, mostly, I will take a look at if you revise the content per my comment at the presentation. Thus, any penalty at the presentation can be recovered.

You also need to email the instructor the **peer evaluation** for the term paper. If you don't email me peer evaluation in the format of term project presentation, I assume, all of you contribute the work fairly well.

For example, your team score is 95% and your peer evaluation by your team members are 100%, your score is 95 (= 95 x 100%)

1). You can use your term paper template "termPaperForm11212016.doc" that I share.

2). Term paper should be 4 - 5 pages. If less than or more than it, you will not get the good grade.

3) Term paper requires to follow the structured in order to get the good score as below:

NOTE: for Azure ML, I prefer the diagram and table that are drawn **not the screenshot** except AzureML experiment diagram

Abstract: one or two paragraphs summary of your work

Introduction: why you choose this topic and why your work/topic should be important. And what is the background of your work

Related work: Describe 1 paragraph of 2 or 3 papers that adopt the similar works as you have done; Then, present the difference between yours and theirs. Mostly yours should be different from others as yours is Big Data using Spark on Cloud Computing.

Background/existing work: Detailed background and existing work that your work is based on

Your work: Illustrate your work; you'd better present algorithm or process instead of code as your github should have the link of the Azure ML studio and the codes. You have to present a diagram of your work which is similar to Azure ML's experiment. It requires **table**(s) that compare the result of the models.

Conclusion: summarize what you have did, why your work is interesting or important, what you have built, how accurate your prediction is and what you learned from the work

References: Papers, articles, URLs (your github, data source,, Azure Studio link, …) that you referred to

Term Project Tutorial Rubric: 100%

1. Materials Available (30%)
    a. Build an ElasticSearch and/or Azure ML Studio experiment as a tutorial, which includes step-by-step direction and documentation that anyone can re-build and run your model.
    b. If Data Set can be downloadable per your direction (15%)
    c. If source code is downloadable per your direction (15%)
2. Completeness of Markdown file (70%)
    a. If each step is clear to follow (25%)
    b. If the source code is correct (15%)
    c. If the source codes are executable or possible to copy/paste to execute (15%)
    d. If the visualization is easy to follow or clearly executable (15%)

NOTE: You also need to email the instructor the **peer evaluation** for the term paper (**Optional**). If you don't email me peer evaluation, I assume, all of you contribute the work fairly well.

For example, your team score is 95% and your peer evaluation by your team members are 100%, your score is 95 (= 95 x 100%)