CS 395
Project Part 3
35 Points Total
Due in Canvas by 11:59 PM on Friday, April 26, 2019

This is the last of three parts of your course project.   This third part asks you to present your findings, demonstrate the knowledge gained after implementing parts 1 and 2 (and the corresponding feedback), fully develop your model, show your results, and explain lessons learned.

There are two parts of this assignment – your **final presentation** and your **final report.**

Final presentations will be made on Monday, April 22 and Wednesday, April 24 according to the schedule we decided in class:

Monday 4/22

1. Eric/Alex
2. Tyler A/ Oliver
3. Abraham
4. Evan
5. Noah
6. Kevin/Eric
7. Lauren/Joshua

Wednesday 4/24

1. Tyler M/Daniel
2. Matt S
3. Robert/Nate
4. Sachin/Ashley
5. Isaac
6. Erika
7. Ian

Presentations should be 8-10 minutes in length; this means they should be concise and focus on the following areas:

1. A clear description of the problem you are trying to solve
2. The approaches you decided to take (no need to go into detail in the presentation as to why you took those approaches; that will go into your report)
3. Any state-of-the-art approaches others have taken
4. Your results (and how they differ from the state-of-the-art) and briefly why you think they differ.
5. Lessons learned about your project

You can expect a few questions from the class. If you have a team of two, either one of you or both of you can present.

The **final report** should be a more revised version of what you submitted for the second part of the project.

Requirements for written part of project are given below.

1. Choose and describe the problem you are trying to solve. Clarity is important in your answer.

2. Describe your approach in detail, considering all the feedback you have received (and any additional research you have performed). Make sure you answer the following adequately:
    a. What kind of problem are you trying to solve? Regression? Classification? Clustering?
    b. If classification, what classes are your outputs?
    c. Why did you take this approach?

3. Describe the state-of-the-art solutions by others on the same dataset.
    a. What are the differences with your approach with theirs?
    b. What are the differences according to your metrics?

4. What is/are the metric(s) you are using? Justify their use. If you are using data from a competition, it may be that others are using that metric, so you want to compare your answer against theirs.

5. What is/are the activation functions used in your model? Where are they used? Show a few variations and how this affects your results.

6. After choosing the best activation functions, what is/are the loss functions used in your model?

7. Draw a general picture of your model, including the layers and inputs/outputs. There are lots of examples online and, depending on your model, can be refined based on your needs.

8. A general idea of the lessons learned doing the project (this can be an expanded version of what you had provided in your presentation).

Make sure if you are working with another person, both names appear on your submission.

What to turn in by the deadline (late penalties apply)

- ʃ A pdf copy of your PowerPoint presentation (print them as one-slide-per-page)
- ʃ A pdf or docx copy of your Word document
- ʃ A copy of your Jupiter notebook (or equivalent) showing your work

Yes, you can create a single zip file for all files.