CS 395 Project Part 2 35 Points Total Due in Canvas by 11:59 PM on Sunday, April 14, 2019

This is the second of three parts of your course project. This second part asks you to demonstrate that you have decided on your approach, have considered my feedback from part 1, developed your model, began to evaluate your hyperparameters, and have obtained some preliminary results. At this point, your outputs might be a bit rough and you may be still experimenting with some hyperparameters, but you are close to the final results.

The third (and final) part will be due in just over a week. In class, you will be asked to provide/present your results as part of a presentation (more about that in the next assignment). Remember the final project deliverable will incorporate what is being asked in this assignment (subject to refinements after receiving feedback) so when you prepare this second part, keep this in mind.

Requirements for this second project assignment are given below.

- 1. (5 points) Choose and describe the problem you are trying to solve. Clarity is important in your answer.
- 2. (10 points) Describe your approach in detail, taking into account all the feedback you have received (and any additional research you have performed).
 - 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. (5 points) 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. (5 points) What is 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. (5 points) 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. (5 points) Next, after choosing the best activation functions, what is/are the loss functions used in your model? Where are they used? Show a few variations and how this affects your results.

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

Provide the above in a single pdf or docx document by the due date.