Course Project

Requirements

- Every student must participate in any one of the **Kaggle competitions**
- You are highly encouraged to choose active competition, although inactive competition with late submission is OK. (Some competitions have ended, but late submission is still allowed by Kaggle. You can submit your predictions to Kaggle and see your score; but you will not be ranked.) Inactive competitions ended long ago do not accept late submission; do NOT participate in such a competition!!!
- You must try several different methods to solve the problem. The method you finally choose for the competition does not have to be a deep neural network; however, you must try at least one deep learning method and implement it using TensorFlow or Keras.
- You must compare your fancy methods with simple baselines, e.g., random guess, all-positive, all-negative, simple linear models, and beat the baselines. The evaluation metric must be the one required by the competition.

Submissions and Grading

- **Source code**. You must create a Github repository (or multiple repositories). Submit the URL of the repository to Canvas. Do NOT submit zip/tar packages.
- **Document**. You must create a PDF document using LaTeX, Markdown, or Jupyper notebook; here is **a Latex template** and **a sample report**. If you do not have LaTeX editor, you can use the online editor **OverLeaf**. Please make the document short and concise! Page limit: 3~10 pages. Put the PDF file in your Github repository and submit the URL to Canvas.
- **Scores and ranking.** Report your scores and ranking in the public leaderboard and the private leaderboard (if available).
- The average grade is around $17/20 = 85\%$. It means on average, you will lose 3 points. Try to submit your project to Canvas 2 weeks before the deadline so that you will get feedbacks from the instructor and will be able to make corrections.

Teamwork

- You are encouraged to work on your own project. Teamwork (up to 3 students) is allowed if the Kaggle competition has a heavy workload; $\frac{workload}{teamsize}$ will be considered in the grading.
- If the project is teamwork, all the team members will get the same score.

Bonus

- Getting a very high ranking (percentile) in active competition will receive up to 5 bonus scores (to the total).
- Some excellent projects will be chosen to give presentations and will be rewarded up to 5 bonus scores (to the total).
- If a team ranks top 1% in active competition, every team member will get “A”, disregarding their homework, quizzes, and the final.