

CSCI 567 Fall 2015 Mini-Project

Kaggle Competition: How Much Did It Rain? II

1 Introduction

In this course mini-project, you will have the chance to explore interesting machine learning problems by participating in a kaggle competition. You will take the competition named **How Much Did It Rain? II**, which aims to predict hourly rainfall using data from polarimetric radars. For more details, please refer to official competition website: <https://www.kaggle.com/c/how-much-did-it-rain-ii>.

The project should be done as a team of **up to 3 members**.

2 Grading criteria

- Your grade for this project is based on two components, 1) your team's relative ranking on the leaderboard (**60%**) and 2) the project report and the code (**40%**).
- Note that the leaderboard shows the ranking of all teams, not only those in this class. We will take the relative ranking among all teams into consideration. A better ranking will always lead to a better grade.
- In your report, you should cover the details of your solutions, including the general ideas, the way of data processing and cleaning, the learning algorithms and models you have tried, the results you get, and any other insightful thoughts during the competition. You should also describe how to run your code to get the results.
- Members of the same team will receive the same scores.
- The team that wins the 1st place among all the teams in machine learning class will get 5 bonus points in the total score for machine learning class. If the team wins the 1st place among all teams in kaggle, it will get 5 more bonus points in the total score. We will consider the ranking on the public leaderboard on Dec 7, at 11:59pm for the bonus points. We may announce additional bonus policy later.

3 What to turn in & deadlines

- Form a team of up to three(3) students by **Oct 30, 11:59pm** and fill out the sign-up form in this [google doc](#). Please log in with your USC email. The name of your team on the leadboard should begin with MLCLASS_. e.g. MLCLASS.awesome, etc.
- We will grade you based on your ranking in the online public leaderboard on **Dec 7, at 11:59pm**, which is also the official competition deadline. No later changes will be taken into account.
- Each team needs to write the project report **in NIPS format**. (6 pages maximum, including the reference; this page limit is strict). The NIPS LATEX format can be found here: <http://nips.cc/Conferences/2014/PaperInformation/StyleFiles>. Not following the format will lower your grade. Each team should submit only one hard copy of the report to Locker 19 at PHE no earlier than **Dec 4**. The deadline for submitting the hard copy of your report is **Dec 8, 6pm**.
- Each team also needs to submit the project **report** and all the **codes** via blackboard. The deadline for blackboard submission is **Dec 8, 11:59pm**.
- We will not accept any later submissions, either in hard copy or online version.

4 Collaboration

In line with the rules of the competition, you are only allowed to collaborate within your own team. Your code will be analyzed to reproduce the results and compare similarity to code from other groups. All members of the violation group will get an "F" for this course. So please obey the rules.