

PROJECT 5

DUE: 11:59PM, APRIL 22

1 Introduction

In this project, you will need to train a regression model to predict how likely an Indian student is admitted to a graduate school. We are going to use the following dataset.

Graduate Admissions. This dataset was collected by Acharya et al. [1]. It contains several parameters which are considered important during the application for Masters Programs. The parameters included are: 1. GRE Scores (out of 340) 2. TOEFL Scores (out of 120) 3. University Rating (out of 5) 4. Statement of Purpose and Letter of Recommendation Strength (out of 5) 5. Undergraduate GPA (out of 10) 6. Research Experience (either 0 or 1) 7. Chance of Admit (ranging from 0 to 1). So the goal here is to predict Chance of Admit using the left parameters. You can download it from <https://www.kaggle.com/mohansacharya/graduate-admissions>.

Bonus Question. You will get another 5 points if you can build at least three different models and compare their performance using cross-validation.

2 Submission

You will need to submit one **pdf** file generated by the notebook. Fail to do so will make your final grade deducted. Make sure all codes are run before generating the pdf file. In the report, you should specify your model details when necessary. Try to write your code clearly so that someone else reading the code can understand it without significant effort (i.e. structure it and put enough documentation). The final grade is based on the clarity of your report.

3 Collaboration

Note that this is an **independent** project, which means you are not allowed to make a group. However, discussion is allowed. If you have discussed with someone or got any help from others, you need to clearly specify their names in acknowledgement.

References

- [1] Aneeta S Antony Mohan S Acharya, Asfia Armaan. A comparison of regression models for prediction of graduate admissions. In *ICCIDS*, 2019.