**Meeting Time:** 3:00 -3:50 pm April 17, 2023

**Attendees:** Xia Jiang, Zhen Yang

**Meeting agenda**

1. Reviewed Mongodb related files and codes.
2. Updated the technote about the database.

/Users/xij6/Documents/Research/git/XiaJiang-2Github/iMedbot-dev/docs/TechNodes/WorkWithDatabase.docx

1. New work assignment.

**Comments**

Feedbacks from Dr. Jiang based on the new test done today.

1. Question regarding the ROC curve: what exactly was plotted, currently via the iMedbot app, the mean\_test or the true validation AUC? We will exam this in details next meeting.

Our code generates the true validation AUC, not the mean test AUC.

1.The data is split into two parts using StratifiedShuffleSplit: 80% for cross-validated grid search (X\_CV, Y\_CV) and 20% for validation (X\_val, Y\_val).

2.Grid search is performed with cross-validation using GridSearchCV, and the best model is selected based on the AUC metric.

3.The best model's predictions on the validation set (X\_val) are used to calculate the true validation AUC. The true positive rate (TPR) and false positive rate (FPR) are computed using roc\_curve(Y\_val.astype(float), Y\_pred1.astype(float)), and the AUC is calculated using auc(FP, TP).

1. When testing with new patients, the values are retrieved automatically from datasets which only contain digits, which are hard understand for human. This is a tough issue because we assume the user uses his/her own dataset what we can’t control. But still hope there is a solution. We worked around this with the iMed.
2. Not sure how you determined the waiting time, but I noticed it is different for different figures (see below), and the estimate is off. For example, you said to wait for 60 seconds in the message shown below, but I waited way longer to see the output figures.

Graphical user interface, text

Description automatically generated

Text

Description automatically generated

1. Since the warning will delay generating the figure, should you remind the user to close the warning message? (See the screenshots above).
2. The heatmap plot I tested has “strange looking” fonts in the printed pdf file (see the screenshot below). Please fixed the problem.

Chart, bar chart, treemap chart

Description automatically generated

**Specific tasks before next meeting.**

1. Review and fully understand the detailed work flow (including codes) of Mongodb by using testing examples. We will check on how the information follows among all relevant files or database collections (Survey, User, and Verification)next meeting.
2. Do similar work with Google Analytics, Trello Board (error reporting), Shap, and user registration, other important and time consuming work that you can recall, and we will test together during the following meetings.

**Less urgent tasks**