IST 5535 Data Competition Result

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Hi all,

Data competition scores are available now. The following table summarizes the top submissions. You can find that advanced machine learning methods with hyperparameter tuning and feature selection usually lead to good performance. One student also tried deep learning but I found the deep learning model is too shallow (we usually needs a deep structure) and thus the performance is not comparable to classical methods.

Student	Methods	F1 Score	Extra Credit
Nghia Le	Ensemble of logit, random forests, GBM, KNN, and SVM; hyperparameter tuning.	0.94501	3%
Yizhi Ma	Random forests; feature selection; hyperparameter tuning.	0.92614	3%
Shalini Venkata	Random forests	0.92593	3%
Ayan Roy	Deep learning	0.91738	1%
Apurv Saxena	Logistic regression	0.9049	1%

Two common mistakes some students made in the submissions:

1. Did not calculate precision, recall, and F1 score by using correct formulas;

2. Did not follow the instructions that a dedicated test set needs to be used to test the formance of the model.

I hope this gives you some experiences of machine learning data competition. With such experiences, you now can participate in some data competitions such as those hosted on kaggle.com. My previous students who got data scientist positions told me that those data competitions are very helpful. If you want to seek a data scientist job in the future, I'd strongly recommend you to participate in some data competitions. Many companies are also using data competitions to screen data scientist candidates.

BTW, if you haven't chosen your group project presentation time, please do it on the discussion board asap (link: https://mst.instructure.com/courses/35955/discussion_topics/70926).

Best,

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