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| Introduction | Laura Dooley  7/30/2024  Purpose: A combination of different models will be created to improve training performance. |
| Submission 1:  Screen shot of spiral data frame graph |  |
| Submission 2:  Screen shot of train/test ada performance |  |
| Submission 3:  Analysis | • How does the ADA model compare with the other models?  The ADA model has more consistent performance between training and test sets compared to the others. • Is the ADA boosted classifier overfitting?  The lower overall performance compared to the other models suggest it might be underfitting. |
| Submission 4:  Screen shot of train/test for random forest performance |  |
| Submission 5:  Analysis | • How does the RF model compare with the other models?  The RF model demonstrates the best among all the other models on the test data. • Is the RF classifier overfitting? Despite the perfect training scores indicating overfitting the high test scores indicate the model generalizes well compared to the other models. |
| Submission 6:  Screen shot of train/test performance for voting classifier |  |
| Submission 7:  Analysis | • How does the voting model compare with the other models? The voting model provides high test accuracy and F1 when compared to the other models  • Is the voting classifier overfitting? No the voting model is not overfitting |
| Submission 8:  analysis | Does the cross validation give us a good idea of how well the decision tree will perform on the test set? The Cross validation provided a good estimate of model performance and suggest the model is decent. |
| Submission 9:  Screenshot of results table |  |
| Submission 10:  prediction | • Value being changed and how much  Width = 0.3 to 0.7 • Predicted change in accuracy  The accuracy will go down |
| Submission 11:  Graph and random Forest performance |  |
| Submission 12:  Analysis | • Did your prediction match the actual performance.  yes • Propose an explanation  The accuracy was already 100 % changing the width I would think the accuracy would go up but I dint think you would be able to pass 100% |