FinTech Unit 11 Homework: Grading Rubric

Criteria	Ratings			
Resampling • **Data** Oversampled with **Naive Random Oversampler** and **SMOTE** algorithms**.** • **Data** Undersampled with **Cluster Centroids** algorithm. • **Data Over** and **Undersampled** with combination of **SMOTEENN** algorithim. • For all methods: Generate the **Balance Accuracy Score**, **Confusion Matrix** and **Classification Report**. **Classification Analysis** • **Best Balanced Accuracy Score** model determined. • **Best Recall Score Model** determined. • **Best Geometric Mean Score** determined.	**35 Points Mastery** • Completed 7 out of 7 requirements • Code runs without error and produces the assigned results • Code accounts for all possible scenario • Code is free of bugs	**34 > 28 Points Approaching Mastery** • Completed 4 out of 7 of requirements • Code runs without error • Code produces results as expected 80% of the time	**28 > 23 Points Progressing** • Completed fewer than 2 out of 7 requirements • Code runs without error • Code produces results, but not necessarily the correct results	**23 > 0 Emerging** • Completed 1 or none out of the 7 requirements • No submission • Code runs with error
Ensemble Learning • **Balanced Random Forest** and **Easy ensemble Classifiers trained** using **Quarterly Data.** • **Balance Accuracy Score** calculated from ***sklearn.metrics*** . • **Confusion Matrix** printed from ***sklearn.metrics*** . • **Classification Report** generated using ***imbalanced_classification_report*** from ***imbalanced learn*** . • **Feature Importance** printed and sorted in descending order for balanced random forest classifier along with **Feature Score** **Classification Analysis** • **Best Balanced Accuracy Score** model determined. • **Best Recall Score Model** determined. • **Best Geometric Mean Score** determined. • **Top Three Features** determinded.	**35 Points Mastery** • Completed 9 out of 9 requirements • Code runs without error and produces the assigned results • Code accounts for all possible scenario • Code is free of bugs	**34 > 28 Points Approaching Mastery** • Completed 6 out of 9 of requirements • Code runs without error • Code produces results as expected 80% of the time	**28 > 23 Points Progressing** • Completed 4 out of 9 requirements • Code runs without error • Code produces results, but not necessarily the correct results	**23 > 0 Emerging** • Completed 2 or none out of the 9 requirements • No submission • Code runs with error
Coding Conventions/Formating • Appropriate header, name, short description at top of the notebook • Imports are at the top of the file, just after any headers or subheads. • Files read in from relative file path • Functions and variable names are descriptive, lowercase, with words separated by underscores • Clean code, no repetition, maintainable and highly reusable code. • Appropriate code wrapping and cell sizes • Appropriate subheads as needed	**10 Points Mastery**	**9 Points Approaching Mastery**	**8 Points Progressing**	**8 > 0 Emerging**
Deployment/Submission • Files submitted in personal repo • Appropriate directory structure with correct files needed to run scripts • Appropriate commit messages • Appropriate README	**10 Points Mastery**	**9 Points Approaching Mastery**	**8 Points Progressing**	**8 > 0 Emerging**
Documentation/Comments • Code is well commented with concise, relevant comments	**10 Points Mastery**	**9 Points Approaching Mastery**	**8 Points Progressing**	**8 > 0 Emerging**

TOTAL POINTS

Points	Feedback
0	
0	
0	
0	
0	
0	**LETTER GRADE** **F**