

# CS3244 Team 30 List of References

## EDA and Data Preprocessing

Pramoditha, R. (2021, December 16). Encoding Categorical Variables: One-hot vs Dummy Encoding. *Towards Data Science*.

<https://towardsdatascience.com/encoding-categorical-variables-one-hot-vs-dummy-encoding-6d5b9c46e2db>

user11852. (2018, April). *Featurization before or after dataset splitting [Online forum post]*. StackExchange.

<https://stats.stackexchange.com/questions/338400/featurization-before-or-after-dataset-splitting>

Ander Biguri. (2015, June). *Significance of 99% of variance covered by the first component in PCA [Online forum post]*.

Stackoverflow.

<https://stackoverflow.com/questions/30777569/significance-of-99-of-variance-covered-by-the-first-component-in-pca>

Omamalin, S. J. (2019). *Multicollinearity and how it affects your model*. Kaggle.

<https://www.kaggle.com/code/sjodcre/multicollinearity-and-how-it-affects-your-model>

Allison, P. (2012, September 10). *When Can You Safely Ignore Multicollinearity?* Statistical Horizons.

<https://statisticalhorizons.com/multicollinearity/>

Jermain, N. (2019, June 24). *Transforming Skewed Data for Machine Learning*. Open Data Science.

<https://opendatascience.com/transforming-skewed-data-for-machine-learning/>

-. S. (2020). *Data Dictionary*. Kaggle.

<https://www.kaggle.com/datasets/rikdifos/credit-card-approval-prediction/discussion/119320?datasetId=426827>

Brownlee, J. (2020, August 20). *How to Use StandardScaler and MinMaxScaler Transforms in Python*. Machine Learning Mastery.

[https://machinelearningmastery.com/standardscaler-and-minmaxscaler-transforms-in-python/?utm\\_source=pocket\\_save](https://machinelearningmastery.com/standardscaler-and-minmaxscaler-transforms-in-python/?utm_source=pocket_save)

Muaz, U. (2019, July 25). *Autoencoders vs PCA: when to use ?* Medium.

<https://towardsdatascience.com/autoencoders-vs-pca-when-to-use-which-73de063f5d7>

Wang, Z. (2018, August 10). *Practical tips for class imbalance in binary classification*. Medium.

<https://towardsdatascience.com/practical-tips-for-class-imbalance-in-binary-classification-6ee29bcd8a7>

Mangale, S. (2020, August 28). *Scree Plot*. Medium. <https://sanchitamangale12.medium.com/scree-plot-733ed72c8608>

jamesmf. (n.d.). *Why does applying PCA on targets causes underfitting? [Online forum post]*. StackExchange.

<https://datascience.stackexchange.com/questions/8087/why-does-applying-pca-on-targets-causes-underfitting>

Baretto, P. (2020, June 3). *Removing Multicollinearity for Linear and Logistic Regression*. Medium.

<https://medium.com/analytics-vidhya/removing-multi-collinearity-for-linear-and-logistic-regression-f1fa744f3666>

*Is standardization needed before fitting logistic regression?* (n.d.). Cross Validated. Retrieved November 15, 2022, from

<https://stats.stackexchange.com/questions/48360/is-standardization-needed-before-fitting-logistic-regression>

Pulagam, S. (2020, August 1). *Feature Scaling — Effectively Choose Input Variables Based on Distributions*. Medium.

<https://towardsdatascience.com/feature-scaling-effectively-choose-input-variables-based-on-distributions-3032207c921f>

Lee, W.-M. (2022, February 2). *Using Principal Component Analysis (PCA) for Machine Learning*. Medium.

<https://towardsdatascience.com/using-principal-component-analysis-pca-for-machine-learning-b6e803f5bf1e>

## Labelling

Seanny. “Credit Card Approval Prediction Using ML.” *Kaggle.com*, 2020,

[www.kaggle.com/code/rikdifos/credit-card-approval-prediction-using-ml](http://www.kaggle.com/code/rikdifos/credit-card-approval-prediction-using-ml). Accessed 15 Nov. 2022.

## SMOTE/ SMOTENC

Brownlee, J. (2020, January 16). *SMOTE for Imbalanced Classification with Python*. Machine Learning Mastery.

<https://machinelearningmastery.com/smote-oversampling-for-imbalanced-classification/>

Keller, J. (2020, January 30). *Upsampling with SMOTE for Classification Projects*. Medium.

<https://towardsdatascience.com/upsampling-with-smote-for-classification-projects-e91d7c44e4bf>

SATPATHY, S. (2020, October 6). *SMOTE - A Common Technique to Overcome Class Imbalance Problem*. Analytics Vidhya.

<https://www.analyticsvidhya.com/blog/2020/10/overcoming-class-imbalance-using-smote-techniques/>

Wijaya, C. Y. (2021, October 12). *5 SMOTE Techniques for Oversampling your Imbalance Data*. Medium.

<https://towardsdatascience.com/5-smote-techniques-for-oversampling-your-imbalance-data-b8155bdbe2b5>

Lema, G., Nogueira, F., & Aridas, C. K. (n.d.). *SMOTENC — Version 0.9.1*. Imbalanced Learn.

[https://imbalanced-learn.org/stable/references/generated/imblearn.over\\_sampling.SMOTENC.html](https://imbalanced-learn.org/stable/references/generated/imblearn.over_sampling.SMOTENC.html)

## Logistic Regression

Brownlee, J. (2016, September 22). *Logistic Regression for Machine Learning*. Machine Learning Mastery.

<https://machinelearningmastery.com/logistic-regression-for-machine-learning/>

Brownlee, J. (2020, January 27). *Cost-Sensitive Logistic Regression for Imbalanced Classification*. Machine Learning Mastery.

<https://machinelearningmastery.com/cost-sensitive-logistic-regression/>

jazib jamil. (2015, March). Controlling the threshold in Logistic Regression in Scikit Learn [Online forum post]. Stackoverflow.

<https://stackoverflow.com/questions/28716241/controlling-the-threshold-in-logistic-regression-in-scikit-learn>

M, D. (2022, July 10). Handling imbalanced data with class weights in logistic regression. *Analytics India Magazine*.

<https://analyticsindiamag.com/handling-imbalanced-data-with-class-weights-in-logistic-regression/>

Andreas Mueller. (2015, June). *How does the class\_weight parameter in scikit-learn work?* [Online forum post]. Stackoverflow.

<https://stackoverflow.com/questions/30972029/how-does-the-class-weight-parameter-in-scikit-learn-work>

Jermain, N. (2019, June 6). *Strategies for Addressing Class Imbalance*. Open Data Science.

<https://opendatascience.com/strategies-for-addressing-class-imbalance/>

Dino, L. (2022, April 23). *Define threshold of logistic regression in Python*. Medium.

<https://medium.com/@24littledino/define-threshold-of-logistic-regression-in-python-56c60664fc3e>

rohan007. (n.d.). *Stratified K Fold Cross Validation*. GeeksforGeeks.

[https://www.geeksforgeeks.org/stratified-k-fold-cross-validation/?utm\\_source=pocket\\_saves](https://www.geeksforgeeks.org/stratified-k-fold-cross-validation/?utm_source=pocket_saves)

Pedregosa, F. et al (n.d.). *sklearn.linear\_model.LogisticRegression*. Scikit-learn.

[https://scikit-learn.org/stable/modules/generated/sklearn.linear\\_model.LogisticRegression.html](https://scikit-learn.org/stable/modules/generated/sklearn.linear_model.LogisticRegression.html)

## Decision Tree

scikit learn. (2009). *1.10. Decision Trees — scikit-learn 0.22 documentation*. Scikit-Learn.org.

<https://scikit-learn.org/stable/modules/tree.html>

*What Is a Decision Tree and How Is It Used?* (n.d.). Careerfoundry.com.

<https://careerfoundry.com/en/blog/data-analytics/what-is-a-decision-tree/#:~:text=Decision%20trees%20are%20extremely%20useful>

## Random Forest

Koehrsen, Will. “Random Forest in Python.” *Medium*, Towards Data Science, 27 Dec. 2017,

[towardsdatascience.com/random-forest-in-python-24d0893d51c0](https://towardsdatascience.com/random-forest-in-python-24d0893d51c0).

Naviani, Avinash. “Sklearn Random Forest Classifiers in Python Tutorial.” *Www.datacamp.com*, May 2018,

[www.datacamp.com/tutorial/random-forests-classifier-python](https://www.datacamp.com/tutorial/random-forests-classifier-python).

“Credit Card Predictive Analysis.” *Kaggle.com*, 2020, [www.kaggle.com/code/umerkk12/credit-card-predictive-analysis](https://www.kaggle.com/code/umerkk12/credit-card-predictive-analysis).

Accessed 15 Nov. 2022.

## AdaBoost

Akash Desarda. (2019, January 17). *Understanding AdaBoost*. Medium; Towards Data Science.

<https://towardsdatascience.com/understanding-adaboost-2f94f22d5bfe>

Brownlee, J. (2020, April 30). *How to Develop an AdaBoost Ensemble in Python*. Machine Learning Mastery.

<https://machinelearningmastery.com/adaboost-ensemble-in-python/>

Delacruz, C. (2021, July 2). *How To Include An ADA Boost Model's Base Estimator In A Grid Search When It's Contained In A....* Medium.

<https://c-delacruz.medium.com/how-to-include-an-ada-boost-models-base-estimator-in-a-grid-search-when-it-s-contained-in-a-b328568a2b83>

*python - Using GridSearchCV with AdaBoost and DecisionTreeClassifier*. (n.d.). Stack Overflow. Retrieved November 15, 2022,

from <https://stackoverflow.com/questions/32210569/using-gridsearchcv-with-adaboost-and-decisiontreeclassifier>

Starmer, J. (2019). AdaBoost, Clearly Explained [YouTube Video]. In *YouTube*.

<https://www.youtube.com/watch?v=LsK-xG1cLYA>

## XGBoost

Amy. (2021, November 7). *Hyperparameter Tuning For XGBoost: Grid Search Vs Random Search Vs Bayesian Optimization*.

Grab N Go Info.

<https://grabngoinfo.com/hyperparameter-tuning-for-xgboost-grid-search-vs-random-search-vs-bayesian-optimization/>

Analytics Vidhya. (2016, March). *Complete Guide to Parameter Tuning in XGBoost (with codes in Python)*. Analytics Vidhya.

<https://www.analyticsvidhya.com/blog/2016/03/complete-guide-parameter-tuning-xgboost-with-codes-python/>

Okamura, S. (2020, December 30). *GridSearchCV for Beginners*. Medium.

<https://towardsdatascience.com/gridsearchcv-for-beginners-db48a90114ee>

Brownlee, J. (2020, February 5). *How to Configure XGBoost for Imbalanced Classification*. Machine Learning Mastery.

<https://machinelearningmastery.com/xgboost-for-imbalanced-classification/>

## Clustering

*sklearn.cluster.KMeans — scikit-learn 0.21.3 documentation*. (2019). Scikit-Learn.org.

<https://scikit-learn.org/stable/modules/generated/sklearn.cluster.KMeans.html>

Kumar, Ch. N. S., Rao, K. N., Govardhan, A., & Sandhya, N. (2015). Subset K-Means Approach for Handling

Imbalanced-Distributed Data. *Advances in Intelligent Systems and Computing*, 497–508.

[https://doi.org/10.1007/978-3-319-13731-5\\_54](https://doi.org/10.1007/978-3-319-13731-5_54)

## **LIME**

Wijesinghe, Vikum. “Explaining Random Forest Model with LIME.” *Kaggle.com*, 2019,

[www.kaggle.com/code/vikumsw/explaining-random-forest-model-with-lime](https://www.kaggle.com/code/vikumsw/explaining-random-forest-model-with-lime). Accessed 15 Nov. 2022.

Banerjee, P. (2019). *Explain your model predictions with LIME*. Kaggle.

<https://www.kaggle.com/code/prashant111/explain-your-model-predictions-with-lime/notebook>

Kuo, C. (2020, February 20). *Explain Your Model with LIME*. Medium.

<https://medium.com/dataman-in-ai/explain-your-model-with-lime-5a1a5867b423>

## **Statement of Independent Work**

University of Pretoria. (n.d.). Assignment Front Page and Declaration. In *University of Pretoria*.

[https://www.up.ac.za/media/shared/25/Forms/assignment\\_mark\\_frontpage.docx](https://www.up.ac.za/media/shared/25/Forms/assignment_mark_frontpage.docx)