# Research

<https://www.kaggle.com/code/barbarabernal/taylor-swift-a-exploratory-data-analysis>

Popularity as the dependent variable: <https://www.kaggle.com/code/tongthongsa/taylor-swift-eda-167603>

Lyrics: <https://www.kaggle.com/code/ritabratad/taylor-swift-song-recommender> --> possible extension to coursework?

**Music Genre Classification using Machine Learning**

[~~https://www.geeksforgeeks.org/music-genre-classifier-using-machine-learning/~~](https://www.geeksforgeeks.org/music-genre-classifier-using-machine-learning/)

[~~https://www.hindawi.com/journals/wcmc/2021/9298654/~~](https://www.hindawi.com/journals/wcmc/2021/9298654/)

<https://medium.com/@shogulomkurganov73/discover-the-magic-of-music-genre-classification-with-machine-learning-cba2b24febd6>

<https://www.clairvoyant.ai/blog/music-genre-classification-using-cnn> (using Convolutional Neural Networks but exploring supervised learning as well)

<https://www.analyticsvidhya.com/blog/2022/03/music-genre-classification-project-using-machine-learning-techniques/> (using KNN and implementing it from scratch)

<https://rpubs.com/jsl0516/spotify_genres> (comparison of KNN and Random Forest)

<https://mct-master.github.io/machine-learning/2021/09/17/stephedg-ml.html>

<https://www.researchgate.net/publication/324218667_Music_Genre_Classification_using_Machine_Learning_Techniques>

<https://id.elsevier.com/as/authorization.oauth2?platSite=SD%2Fscience&scope=openid%20email%20profile%20els_auth_info%20els_idp_info%20els_idp_analytics_attrs%20els_sa_discover%20urn%3Acom%3Aelsevier%3Aidp%3Apolicy%3Aproduct%3Ainst_assoc&response_type=code&redirect_uri=https%3A%2F%2Fwww.sciencedirect.com%2Fuser%2Fidentity%2Flanding&authType=SINGLE_SIGN_IN&prompt=login&client_id=SDFE-v4&state=retryCounter%3D0%26csrfToken%3De24817bd-7b7c-4378-af0f-520ba32e6c8e%26idpPolicy%3Durn%253Acom%253Aelsevier%253Aidp%253Apolicy%253Aproduct%253Ainst_assoc%26returnUrl%3D%252Fscience%252Farticle%252Fabs%252Fpii%252FS0045790622002506%26prompt%3Dlogin%26cid%3Darp-cf2c9d4d-0dc4-4d36-aae1-3542c70750d2>

<https://repository.uel.ac.uk/download/8479822c72c82e73a4160dfb10e6f01bd4ce044d7f5098aeb759f954abf9d9bf/1693074/electronics-11-02567.pdf>

<https://ieeexplore.ieee.org/document/8554016>

<https://www.researchgate.net/publication/370546962_A_Study_on_Music_Genre_Classification_using_Machine_Learning>

<https://www.semanticscholar.org/paper/Music-Genre-Classification-and-Recommendation-by-Elbir-%C3%87am/521c8fb1e13dacd8d2fb955a490abc0473551906>

<https://www.itm-conferences.org/articles/itmconf/pdf/2022/04/itmconf_icacc2022_03016.pdf>

<https://www.irjet.net/archives/V8/i10/IRJET-V8I10228.pdf>

<https://ieeexplore.ieee.org/document/9697137>

**Predicting Songs’ Popularity**

<https://blog.devgenius.io/mini-ml-project-predicting-spotify-songs-popularity-part-1-ec1c906b8ff8>

<https://rpubs.com/burrelllizzie/g10FinalProject>

<https://sander.ai/2014/08/05/spotify-cnns.html>

<https://www.irjet.net/archives/V8/i10/IRJET-V8I1046.pdf>

<https://towardsdatascience.com/identifying-drivers-of-spotify-song-popularity-with-causal-ml-934e8347d2aa>

**Research Article:** <https://www.researchgate.net/publication/370712842_Popularity_Prediction_of_Music_by_Machine_Learning_Models>

<https://www.tandfonline.com/doi/full/10.1080/23270012.2023.2239824>

**KNN**

<https://www.analyticsvidhya.com/blog/2022/01/introduction-to-knn-algorithms/>

<https://towardsdatascience.com/a-simple-introduction-to-k-nearest-neighbors-algorithm-b3519ed98e>

<https://www.mygreatlearning.com/blog/knn-algorithm-introduction/>

<https://towardsdatascience.com/introduction-to-k-nearest-neighbors-3b534bb11d26>

<https://medium.com/@adi.bronshtein/a-quick-introduction-to-k-nearest-neighbors-algorithm-62214cea29c7>

<https://www.analyticssteps.com/blogs/introduction-k-nearest-neighbor-knn-algorithm>

<https://www.kaggle.com/code/rxsraghavagrawal/music-genre-classification-using-knn-begineers>

<https://360digitmg.com/blog/classification-of-music-genre-using-knn>

<https://www.analyticssteps.com/blogs/music-genre-classification-using-machine-learning>

<https://towardsdatascience.com/using-k-nearest-neighbours-to-predict-the-genre-of-spotify-tracks-796bbbad619f>

<https://ijarsct.co.in/Paper2333.pdf>

<https://ieeexplore.ieee.org/document/7930314>

<https://ijirt.org/master/publishedpaper/IJIRT155461_PAPER.pdf>

**Naïve Bayes**

<https://projet.liris.cnrs.fr/imagine/pub/proceedings/ICPR-2010/data/4109e589.pdf>

<https://towardsdatascience.com/i-built-a-naive-bayes-model-to-predict-genre-from-song-lyrics-and-it-went-ok-ish-639af0b0a078>

<https://ieeexplore.ieee.org/document/8494161>

<https://notebook.community/gtzan/mir_book/Bayes%20Classification>

<https://www.researchgate.net/publication/220932746_Learning_Naive_Bayes_Classifiers_for_Music_Classification_and_Retrieval>

**Decision Tree**

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<https://www.kaggle.com/code/fareselmenshawii/decision-tree-from-scratch>

<https://towardsdatascience.com/decision-tree-algorithm-in-python-from-scratch-8c43f0e40173>

<https://machinelearningmastery.com/implement-decision-tree-algorithm-scratch-python/>

<https://medium.com/@enozeren/building-a-decision-tree-from-scratch-324b9a5ed836>

<https://www.analyticsvidhya.com/blog/2020/10/all-about-decision-tree-from-scratch-with-python-implementation/>

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<https://insidelearningmachines.com/build-a-decision-tree-in-python/>

<https://betterdatascience.com/mml-decision-trees/>

<https://medium.com/swlh/decision-tree-from-scratch-a72069240293>

**K-Means Clustering**

<https://medium.com/latinxinai/discovering-descriptive-music-genres-using-k-means-clustering-d19bdea5e443>

<https://medium.com/web-mining-is688-spring-2021/categorizing-music-using-k-means-clustering-b31f951c76d8>

<https://towardsdatascience.com/k-means-clustering-and-pca-to-categorize-music-by-similar-audio-features-df09c93e8b64>

<https://cs229.stanford.edu/proj2015/129_report.pdf>

<https://www.linkedin.com/pulse/clustering-songs-kmeans-glimpse-unsupervised-machine-deepa-pandit>

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<https://www.askpython.com/python/examples/k-means-clustering-from-scratch>

<https://pythonprogramming.net/k-means-from-scratch-machine-learning-tutorial/>

<https://towardsdatascience.com/create-your-own-k-means-clustering-algorithm-in-python-d7d4c9077670>